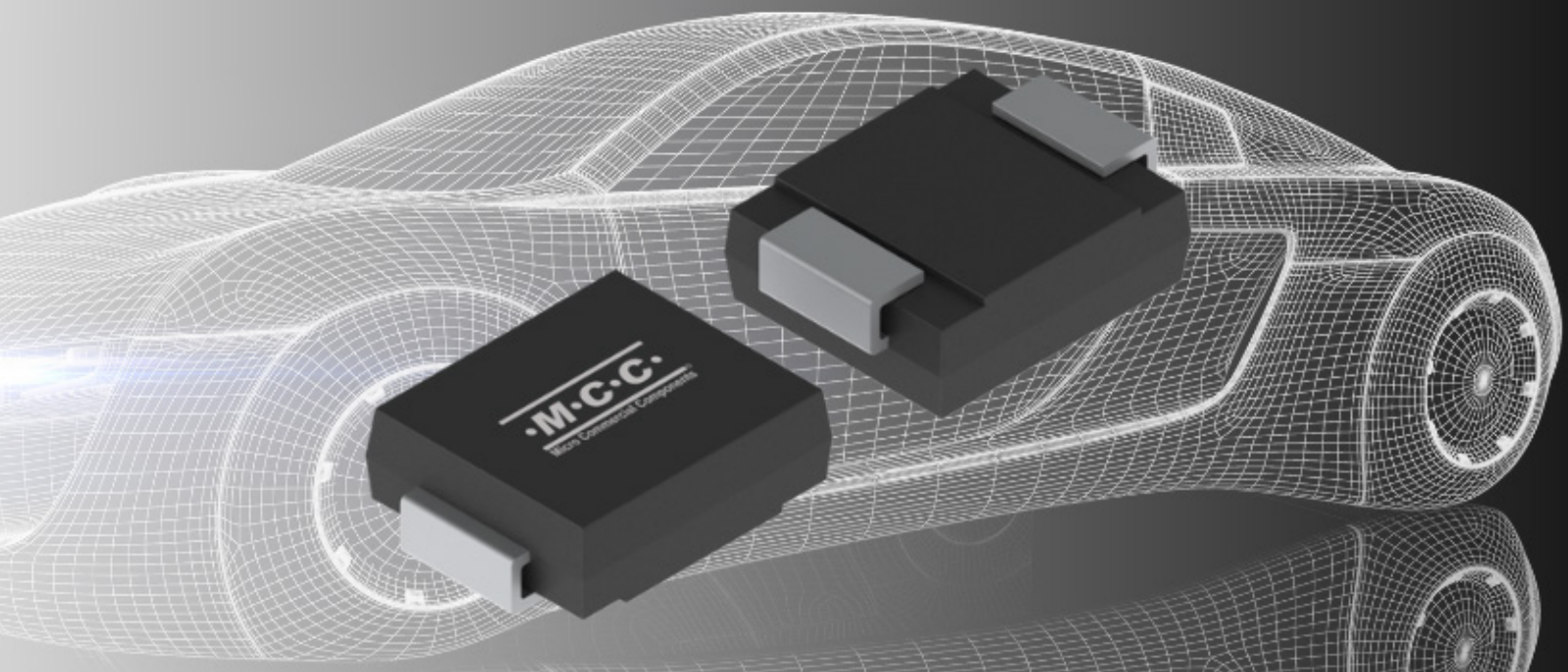




Protection Devices

As electronics systems become smaller and more complex, protection from electrostatic discharge, transients, over-voltage, and EMI is more crucial than ever. MCC's selection of protection solutions safeguards sensitive automotive and industrial designs at the highest level while providing small footprints for design flexibility.

Protection Devices



PRODUCT

ESD Protection



APPLICATION

TVS



APPLICATION

Protection Devices



Automotive ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RWM} (V)	I _{PP} (A)	V _C (V)	I _R (uA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
ESDSBULC3V3LBQ	DFN1006-2	1	Bidirectional	3.3	4	7	0.05	7	-	28	0.45	±15	150
ESD5LC5V0LBHE3	DFN1006-2	1	Bidirectional	5	4	20	0.5	6	9	80	0.35	±20/±15	125
ESDSBULC18VLBQ	DFN1006-2	1	Bidirectional	18	4	9	0.05	18.5	-	36	0.45	±15	150
ESDSBULC24VLBQ	DFN1006-2	1	Bidirectional	24	4	9	0.05	25	32	36	0.45	±15	150
ESDULC3V3LBHE3	DFN1006-2L	1	Bidirectional	3.3	4	20	0.1	4.8	7	80	0.65	±16	150
ESDL3V3LBHE3	DFN1006-2L	1	Bidirectional	3.3	8	9	0.1	4.5	6.5	60	25	±30	150
ESDSB3V3LBHE3	DFN1006-2L	1	Bidirectional	3.3	9	10	1	3.5	6	90	25	±30	150
ESDHSB3V3LBHE3	DFN1006-2L	1	Bidirectional	3.3	14	10	1	3.7	5	140	50	±30	150
ESDULC5V0LBHE3	DFN1006-2L	1	Bidirectional	5	4	25	0.1	6	9.5	100	0.6	±16	150
ESDSB5V0LBHE3	DFN1006-2L	1	Bidirectional	5	7	10	1	5.7	8	70	20	±30	150
ESDLC5V0LBHE3	DFN1006-2L	1	Bidirectional	5	8	10	0.1	6	8	80	15	±30	150
ESDHSB5V0LBHE3	DFN1006-2L	1	Bidirectional	5	11	11	1	5.7	8	121	40	±30	150
ESD7V0LBHE3	DFN1006-2L	1	Bidirectional	7	6	15	0.5	7.5	10.5	90	23	±30	150
ESD7V0LHE3	DFN1006-2L	1	Unidirectional	7	6	15	0.5	7.5	10.5	90	46	±30	150
ESDULC8V0LBHE3	DFN1006-2L	1	Bidirectional	8	3.5	26	0.2	9.5	11.5	90	0.5	±25/±20	125
ESDLC8V0LBHE3	DFN1006-2L	1	Bidirectional	8	8	18	0.2	9	-	140	10	±30	150
ESD12VLBHE3	DFN1006-2L	1	Bidirectional	12	5	30	0.5	13.5	16.5	150	12	±30	150
ESD12VLHE3	DFN1006-2L	1	Unidirectional	12	5	30	0.5	13.5	16.5	150	24	±30	150
ESDLC12VLBHE3	DFN1006-2L	1	Bidirectional	12	5	20	0.2	13.3	-	100	10	±30	150
ESD15VLBHE3	DFN1006-2L	1	Bidirectional	15	4	35	0.5	15.5	19.5	140	10	±30	150
ESD15VLHE3	DFN1006-2L	1	Unidirectional	15	4	35	0.5	15.5	19.5	140	20	±30	150
ESD24VLBHE3	DFN1006-2L	1	Bidirectional	24	3.5	45	0.5	25.5	29.5	150	8.5	±30	150
ESD24VLHE3	DFN1006-2L	1	Unidirectional	24	3.5	45	0.5	25.5	29.5	150	17	±30	150
ESD27VLBHE3	DFN1006-2L	1	Bidirectional	27	2.5	75	0.5	31	38	180	6.5	±30	150
ESD27VLHE3	DFN1006-2L	1	Unidirectional	27	2.5	75	0.5	31	38	180	13	±8	150
ESD36VLBHE3	DFN1006-2L	1	Bidirectional	36	2.5	80	0.5	38	48	200	6	±30	150
ESD36VLHE3	DFN1006-2L	1	Unidirectional	36	2.5	80	0.5	38	48	200	12	±30	150
ESD5LC3V3LWFHE3	DFN1006-2L(SWF)	1	Unidirectional	3.3	4	20	0.2	6	8.5	60	0.6	±20	150
ESDULC3V3LBWFHE3	DFN1006-2L(SWF)	1	Bidirectional	3.3	4	20	0.2	6	9.5	60	0.35	±20	150
ESDULC5V0LBWFHE3	DFN1006-2L(SWF)	1	Bidirectional	5	3	20	0.2	6	8.5	50	0.25	±15/±8	150
ESDULC5V0LWFHE3	DFN1006-2L(SWF)	1	Unidirectional	5	3	20	0.2	6	8.5	50	0.35	±15/±8	150
ESD5LC5V0LWFHE3	DFN1006-2L(SWF)	1	Unidirectional	5	4	20	0.2	6	8.5	60	0.6	±20	150
ESDULC5V0PUBWFHE3	DFN1110-3(SWF)	2	Bidirectional	5	4	14	0.2	6	-	56	0.3	±30	125
ESDSBLC24VPUBWFHE3	DFN1110-3(SWF)	2	Bidirectional	24	5	34	0.2	26.5	-	170	5	±30	125
ESD5LC0524DFN10HE3	DFN-10	4	Unidirectional	5	5	13	0.1	6	9	60	0.9	±25/±20	125
ESDSBLC2424P5WFHE3	DFN2510-10(SWF)	4	Bidirectional	24	5	35	0.2	26.5	36	170	9	±30	125
ESDL3V3D3BHE3	SOD-323	1	Bidirectional	3.3	9	10	1	3.5	6	90	25	±30	150
ESDL5V0D3BHE3A	SOD-323	1	Bidirectional	5	7	10	1	5.8	8	70	20	±30	150
ESD5V0D3HE3	SOD-323	1	Unidirectional	5	20	15	1	6.2	7.5	300	160	±30	150
ESDSB5V0D3BHE3	SOD-323	1	Bidirectional	5	24	17	1	6	-	400	100	±30	150
ESDH5V0D3HE3	SOD-323	1	Unidirectional	5	30	20	1	6.2	7.5	600	220	±30	150
ESD12VD3BHE3	SOD-323	1	Bidirectional	12	10	28	1	13.3	-	280	50	±30	150
ESD12VD3HE3	SOD-323	1	Unidirectional	12	10	28	1	13.3	16.5	280	70	±30	150
ESD1524D3BHE3A	SOD-323	1	Asymmetric	15	5	35	0.05	17.1	20.3	160	30	±30	150

Automotive ESD Protection



Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RWM} (V)	I _{PP} (A)	V _C (V)	I _{RS} (uA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
ESD15VD3BHE3	SOD-323	1	Bidirectional	15	5	28.5	1	16.7	-	250	45	±30	150
ESD15VD3HE3	SOD-323	1	Unidirectional	15	8	35	1	16.5	19	250	55	±30	150
ESD24VD3BHE3	SOD-323	1	Bidirectional	24	7	44	1	26.7	-	300	40	±30	150
ESD24VD3HE3	SOD-323	1	Unidirectional	24	7	44	1	26.7	-	300	50	±30	150
ESD27VD3BHE3	SOD-323	1	Bidirectional	27	4	65	0.5	28.5	-	260	20	±30	150
ESD36VD3BHE3	SOD-323	1	Bidirectional	36	5	75	1	40	-	350	35	±30	150
ESD36VD3HE3	SOD-323	1	Unidirectional	36	5	75	1	40	44	350	35	±30	150
ESDL3V3D5BHE3	SOD-523	1	Bidirectional	3.3	9	10	1	3.5	6	90	25	±30	150
ESDSBL5V0D5BHE3	SOD-523	1	Bidirectional	5	7	10	1	5.7	8	70	20	±30	150
ESD5V0D5HE3	SOD-523	1	Unidirectional	5	20	15	1	6.2	7.5	300	160	±30	150
ESD12VD5HE3	SOD-523	1	Unidirectional	12	10	28	1	13.3	16.5	280	70	±30	150
ESD15VD5HE3	SOD-523	1	Unidirectional	15	8	35	1	16.5	19	250	55	±30	150
ESD24VD5HE3	SOD-523	1	Unidirectional	24	7	44	1	26.7	-	300	50	±30	150
ESD36VD5HE3	SOD-523	1	Unidirectional	36	5	75	1	40	44	350	24	±30	150
ESD3V3T2BHE3	SOT-23	2	Bidirectional	3.3	25	16	0.5	5	7	400	100	±30	150
ESD5V0T2HE3	SOT-23	2	Unidirectional	5	4	25	0.1	5.8	9.5	100	0.9	±16	150
ESD5V0T2BHE3	SOT-23	2	Bidirectional	5	4	25	0.1	5.8	9.5	100	0.4	±16	150
ESD5V0T2HE3	SOT-23	2	Unidirectional	5	20	15	1	6.2	7.5	300	160	±30	150
ESD5V0T2HE3	SOT-23	2	Unidirectional	5	20	15	1	6.2	7.5	300	160	±30	150
ESDSB5V0T2BHE3	SOT-23	2	Bidirectional	5	24	17	1	6	7.5	400	100	±30	150
ESD7V0T2BHE3	SOT-23	2	Bidirectional	7	17	15	0.5	7.5	10	255	63	±30	150
MMBZ15VAQ	SOT-23	2	Unidirectional	12	1.9	21	0.05	14.25	15.75	40	95	±30	150
MMBZ15VCQ	SOT-23	2	Unidirectional	12	1.9	21	0.05	14.25	15.75	40	95	±30	150
ESD12VET2HE3	SOT-23	2	Unidirectional	12	10	28	1	13.1	16.5	280	70	±30	150
ESD12VT2BHE3	SOT-23	2	Bidirectional	12	10	30	0.1	13.5	16.7	300	35	±30	150
ESD12VT2HE3	SOT-23	2	Unidirectional	12	10	28	1	13.1	16.5	280	70	±30	150
MMBZ16VAQ	SOT-23	2	Unidirectional	13	1.7	23	0.05	15.2	16.8	40	89	±30	150
MMBZ16VCQ	SOT-23	2	Unidirectional	13	1.7	23	0.05	15.2	16.8	40	89	±30	150
MMBZ18VAQ	SOT-23	2	Unidirectional	14.5	1.6	25	0.05	17.1	18.9	40	79	±30	150
MMBZ18VCQ	SOT-23	2	Unidirectional	14.5	1.6	25	0.05	17.1	18.9	40	79	±30	150
ESD15VET2HE3	SOT-23	2	Unidirectional	15	8	35	1	16.1	19	280	55	±30	150
ESD15VT2HE3	SOT-23	2	Unidirectional	15	8	35	1	16.1	19	280	55	±30	150
ESD15VT2BHE3	SOT-23	2	Bidirectional	15	9	30	0.5	16	19	270	26	±30	150
SM15BHE3	SOT-23	2	Bidirectional	15	10	35	0.2	16.7	21	350	35	±30	125
MMBZ20VAHE3	SOT-23	2	Unidirectional	17	1.4	28	0.05	19	21	40	-	±30	150
MMBZ20VCHE3	SOT-23	2	Unidirectional	17	1.4	28	0.05	19	21	40	-	±30	150
MMBZ27VAHE3	SOT-23	2	Unidirectional	22	1	40	0.05	25.65	28.35	40	-	±30	150
MMBZ27VCHE3	SOT-23	2	Unidirectional	22	1	40	0.05	25.65	28.35	40	-	±30	150
ESDSBLC24VT2BHE3	SOT-23	2	Bidirectional	24	2.5	27	0.1	105	125	65	3.8	±30	150
ESDLC24VT2BHE3	SOT-23	2	Bidirectional	24	5	36	0.05	25.5	35.5	180	10	±30	150
SM24BHE3	SOT-23	2	Bidirectional	24	5	60	0.2	27	-	300	15	±30	125
ESD24VET2HE3	SOT-23	2	Unidirectional	24	7	44	1	26.7	-	300	50	±30	150
ESD24VT2BHE3	SOT-23	2	Bidirectional	24	7	44	0.1	26.2	32	308	30	±30	150
ESD24VT2HE3	SOT-23	2	Unidirectional	24	7	44	1	26.7	-	300	50	±30	150

Protection Devices



Automotive ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				$V_{RWM}(V)$	$I_{PP}(A)$	$V_C(V)$	$I_R(\mu A)$	$V_{BR}(V)$ Min	$V_{BR}(V)$ Max	$P_{PK}(W)$	$C_J(pF)$	$V_{ESD}(kV)$	$T_J(^{\circ}C)$
HSM24BHE3	SOT-23	2	Bidirectional	24	8	48	0.1	26.3	30.3	384	32	±30	150
MMBZ33VAQ	SOT-23	2	Unidirectional	26	0.87	47	0.05	31.35	35.65	40	48	±30	150
MMBZ33VCQ	SOT-23	2	Unidirectional	26	0.87	47	0.05	31.35	35.65	40	48	±30	150
ESD27VT2BHE3	SOT-23	2	Bidirectional	27	6	70	0.5	31	38	420	13	±30	150
MMBZ39VAQ	SOT-23	2	Unidirectional	31.2	0.76	55	0.05	37.05	40.95	40	42	±30	150
MMBZ39VCQ	SOT-23	2	Unidirectional	31.2	0.76	55	0.05	37.05	40.95	40	42	±30	150
ESD36VET2HE3	SOT-23	2	Unidirectional	36	5	75	1	40	44.5	350	35	±30	150
ESD36VT2BHE3	SOT-23	2	Bidirectional	36	5	90	0.5	38	48	450	30	±30	150
ESD36VT2HE3	SOT-23	2	Unidirectional	36	5	75	1	40	44.5	350	35	±30	150



Automotive TVS

Part Number	Package	Uni/Bi	Peak Pulse Power Dissipation	Reverse Standoff Voltage	Peak Pulse Current	Max. Clamping Voltage	Breakdown Voltage		Reverse Leakage	Operating Junction Temperature
			P _{PK} (W)	V _{RRM} (V)	I _{PP} (A)	V _C (V)	V _{BR} (V) Min	V _{BR} (V) Max	I _R (uA)	T _J (°C)
SMHE5.0AHE3~SMHE90AHE3	SOD-323HE-B	Uni	150	5~90	1.03~16.3	9.2~146	6.4~100	7.07~111	1~400	150
SMF5.0AHE3~SMF100AHE3	SOD-123FL	Uni	200	5~100	1.1~21.7	9.2~162	6.4~111	7.07~123	1~400	150
SMF5.0AQ~SMF100AQ	SOD-123FL	Uni	200	5~100	1.23~21.74	9.2~162	6.4~111	7.07~123	1~400	175
SMF5.0CAQ~SMF100CAQ	SOD-123FL	Bi	200	5~100	1.23~21.74	9.2~162	6.4~111	7.07~123	1~400	175
SMAJ5.0AHE3~SMAJ90AHE3	SMA	Uni	400	5~190	1.3~43.4	9.2~308	6.4~211	7.07~232	1~800	175
SMAJ5.0CAHE3~SMAJ190CAHE3	SMA	Bi	400	5~190	1.3~43.4	9.2~308	6.4~211	7.07~232	1~800	175
SMAJ5.0AQ~SMAJ190AQ	SMA	Uni	400	5~190	1.3~43.4	9.2~307.8	6.4~211	7.07~232	1~800	175
SMAJ5.0CAQ~SMAJ190CAQ	SMA	Bi	400	5~190	1.3~43.4	9.2~307.8	6.4~211	7.07~232	1~800	175
SMAJP4KE12AHE3~SMAJP4KE220AHE3	SMA	Uni	400	10.2~185	1.2~24.6	16.7~328	11.4~209	12.6~231	1~5	175
SMAJP4KE12CAHE3~SMAJP4KE220CAHE3	SMA	Bi	400	10.2~185	1.2~24.6	16.7~328	11.4~209	12.6~231	1~5	175
SMAJP4KE6.8AQ~SMAJP4KE220AQ	SMA	Uni	400	5.8~185	1.2~38.1	10.5~328	6.46~209	7.14~231	1~1000	175
SMAJP4KE6.8CAQ~SMAJP4KE220CAQ	SMA	Bi	400	5.8~185	1.2~38.1	10.5~328	6.46~209	7.14~231	1~1000	175
SMAJP4KE250AQ~SMAJP4KE550AQ	SMA	Uni	400	214~470	0.53~1.16	344~759	237.5~522.5	262.5~577.5	1	175
SMAJP4KE250CAQ~SMAJP4KE550CAQ	SMA	Bi	400	214~470	0.53~1.16	344~759	237.5~522.5	262.5~577.5	1	175
SM4F6.0AHE3~SM4F100AHE3	SOD-123FL	Uni	400	6~100	2.5~38.8	9.2~162	6.67~111	7.37~123	1~800	150
SM4F6.0CAHE3~SM4F45CAHE3	SOD-123FL	Bi	400	6~45	5.5~38.8	10.3~72.7	6.67~50	7.37~55.3	1~800	150
SMBJ5.0AHE3~SMBJ190AHE3	SMB	Uni	600	5~190	1.9~65.2	9.2~307.8	6.4~211	7.07~232	1~800	175
SMBJ5.0CAHE3~SMBJ190CAHE3	SMB	Bi	600	5~190	1.9~65.2	9.2~307.8	6.4~211	7.07~232	1~800	175
SMBJ5.0AQ~SMBJ190AQ	SMB	Uni	600	5~190	2~65.2	9.2~307.8	6.4~211	7.07~232	1~800	175
SMBJ5.0CAQ~SMBJ190CAQ	SMB	Bi	600	5~190	2~65.2	9.2~307.8	6.4~211	7.07~232	1~800	175
SMBJP6KE12AHE3~SMBJP6KE220AHE3	SMB	Uni	600	10.2~185	1.9~36.5	16.7~328	11.4~209	12.6~231	1~5	175
SMBJP6KE12CAHE3~SMBJP6KE220CAHE3	SMB	Bi	600	10.2~185	1.9~36.5	16.7~328	11.4~209	12.6~231	1~5	175
SMBJP6KE6.8AQ~SMBJP6KE220AQ	SMB	Uni	600	5.8~185	1.8~57.1	10.5~328	6.46~209	7.14~231	1~1000	175
SMBJP6KE6.8CAQ~SMBJP6KE220CAQ	SMB	Bi	600	5.8~185	1.8~57.1	10.5~328	6.46~209	7.14~231	1~1000	175
SMA6J10AHE3~SMA6J100AHE3	SMA	Uni	600	10~100	3.7~35.3	17~162	11.1~111	12.3~123	1~5	150
SMA6J10CAHE3~SMA6J40CAHE3	SMA	Bi	600	10~40	9.3~35.3	17~64.5	11.1~44.4	12.3~49.1	1~5	150
SMA6J10AQ~SMA6J100AQ	SMA	Uni	600	10~100	3.7~35.3	17~162	11.1~111	12.3~123	1~5	175
SMA6J10CAQ~SMA6J20CAQ	SMA	Bi	600	10~20	18.5~35.3	17~32.4	11.1~22.2	12.3~24.5	1~5	175
SMA6J5.0AFLQ~SMA6J100AFLQ	DO-221AC	Uni	600	5~100	3.7~65.22	9.2~162	6.4~111	7.07~123	1~800	175
SMA6J11CAFLQ~SMA6J85CAFLQ	DO-221AC	Bi	600	11~85	4.38~32.97	18.2~137	12.2~94.4	13.5~104	1~5	175
SMB10J5.0AHE3~SMB10J85AHE3	SMB	Uni	1000	5~85	7.3~108.7	9.2~137	6.4~94.4	7.07~104	1~1000	175
SMB10J5.0CAHE3~SMB10J85CAHE3	SMB	Bi	1000	5~85	7.3~108.7	9.2~137	6.4~94.4	7.07~104	1~1000	175
SMBJ1.0KE6.8AHE3~SMBJ1.0KE68AHE3	SMB	Uni	1000	5.8~58.1	10.9~95.2	10.5~92	6.46~64.6	7.14~71.4	5~1000	175
SMBJ1.0KE6.8CAHE3~SMBJ1.0KE68CAHE3	SMB	Bi	1000	5.8~58.1	10.9~95.2	10.5~92	6.46~64.6	7.14~71.4	5~1000	175
SMB15J5.0AHE3~SMB15J85AHE3	SMB	Uni	1500	5~85	10.95~163	9.2~137	6.4~94.4	7.07~104	5~1000	175
SMB15J5.0CAHE3~SMB15J85CAHE3	SMB	Bi	1500	5~85	10.95~163	9.2~137	6.4~94.4	7.07~104	5~1000	175
SMCJ1.5KE12AHE3~SMCJ1.5KE220AHE3	SMC	Uni	1500	10.2~185	4.6~91	16.7~328	11.4~209	12.6~231	1~5	175
SMCJ1.5KE12CAHE3~SMCJ1.5KE220CAHE3	SMC	Bi	1500	10.2~185	4.6~91	16.7~328	11.4~209	12.6~231	1~5	175
SMCJ1.5KE6.8AQ~SMCJ1.5KE220AQ	SMC	Uni	1500	5.8~185	4.6~142.9	10.5~328	6.46~209	7.14~231	1~1000	175
SMCJ1.5KE6.8CAQ~SMCJ1.5KE220CAQ	SMC	Bi	1500	5.8~185	4.6~142.9	10.5~328	6.46~209	7.14~231	1~1000	175
SMCJ10AHE3~SMCJ190AHE3	SMC	Uni	1500	10~190	4.9~88.2	17~307.8	11.1~211	12.3~232	1~5	175
SMCJ10CAHE3~SMCJ190CAHE3	SMC	Bi	1500	10~190	4.9~88.2	17~307.8	11.1~211	12.3~232	1~5	175
SMCJ5.0AQ~SMCJ190AQ	SMC	Uni	1500	5~190	4.9~163	9.2~307.8	6.4~211	7.07~232	1~5	175
SMCJ5.0CAQ~SMCJ190CAQ	SMC	Bi	1500	5~190	4.9~163	9.2~307.8	6.4~211	7.07~232	1~5	175
SMLJ10AHE3A~SMLJ48AHE3A	SMC	Uni	3000	10~48	38.8~176.4	17~77.4	11.1~53.3	12.3~58.9	1~5	150

Protection Devices



Automotive TVS

Part Number	Package	Uni/Bi	Peak Pulse Power Dissipation	Reverse Standoff Voltage	Peak Pulse Current	Max. Clamping Voltage	Breakdown Voltage		Reverse Leakage	Operating Junction Temperature
			P_{PK} (W)	V_{RWM} (V)	I_{PP} (A)	V_C (V)	V_{BR} (V) Min	V_{BR} (V) Max	I_R (uA)	T_J (°C)
SMLJ10CAHE3A~SMLJ48CAHE3A	SMC	Bi	3000	10~48	38.8~176.4	17~77.4	11.1~53.3	12.3~58.9	1~5	150
SMLJ5.0AQ~SMLJ85AQ	SMC	Uni	3000	5~85	21.9~326.09	9.2~137	6.4~94.4	7.07~104	1~1000	175
SMLJ5.0CAQ~SMLJ85CAQ	SMC	Bi	3000	5~85	21.9~326.09	9.2~137	6.4~94.4	7.07~104	1~1000	175
SM5S10AHE3~SM5S43AHE3	DO-218AB	Uni	3600	10~43	52~212	17~69.4	11.1~47.8	12.3~52.8	10~15	175
SM5S10CAHE3~SM5S43CAHE3	DO-218AB	Bi	3600	10~43	52~212	17~69.4	11.1~47.8	12.3~52.8	10~15	175
SM6S10AHE3~SM6S43AHE3	DO-218AB	Uni	4600	10~43	66~271	17~69.4	11.1~47.8	12.3~52.8	10~15	175
SM6S10CAHE3~SM6S43CAHE3	DO-218AB	Bi	4600	10~43	66~271	17~69.4	11.1~47.8	12.3~52.8	10~15	175
5.0SMLJ5.0AHE3~5.0SMLJ85AHE3	SMC	Uni	5000	5~85	36.5~543.6	9.2~137	6.4~94.4	7~104	2~1000	175
5.0SMLJ5.0CAHE3~5.0SMLJ85CAHE3	SMC	Bi	5000	5~85	36.5~543.6	9.2~137	6.4~94.4	7~104	2~1000	175
SM8S10AHE3~SM8S85AHE3	DO-218AB	Uni	6600	10~85	48~388	17~137	11.1~94.4	12.3~104	10~15	175
SM8S10CAHE3~SM8S85CAHE3	DO-218AB	Bi	6600	10~85	48~388	17~137	11.1~94.4	12.3~104	10~15	175
SM8Z10AHE3~SM8Z43AHE3	DO-218AB	Uni	8000	10~43	115.3~470.6	17~69.4	11.1~47.8	12.3~52.8	10~15	175
SM8Z10CAHE3~SM8Z43CAHE3	DO-218AB	Bi	8000	10~43	115.3~470.6	17~69.4	11.1~47.8	12.3~52.8	10~15	175

ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RWM} (V)	I _{PP} (A)	V _C (V)	I _R (μA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
ESD1V8AE2	0201-A	1	Bidirectional	1.8	12	8.5	0.2	2.5	-	100	30	±30	125
ESDSB2V5AE2	0201-A	1	Bidirectional	2.5	10	10	0.1	2.8	-	100	25	±30	125
ESDLC3V3AE2	0201-A	1	Bidirectional	3.3	3	10	0.2	4.3	-	30	3	±30/±28	125
ESDSBSLC3V3AE2	0201-A	1	Bidirectional	3.3	4	8.5	0.05	7	-	34	0.5	±30	125
ESDLC3V3AE2	0201-A	1	Unidirectional	3.3	5	16	0.2	4.2	-	80	0.6	±25/±20	125
ESDUSBULC3V3AE2	0201-A	1	Unidirectional	3.3	5	10	0.1	5	8.5	50	0.3	±30	125
ESDL3V3AE2	0201-A	1	Bidirectional	3.3	8	11	0.2	3.6	5	80	16	±30	125
ESDSBLC3V3AE2	0201-A	1	Bidirectional	3.3	9	10	0.1	3.5	-	90	13	±30	125
ESDHSBLC3V3AE2	0201-A	1	Bidirectional	3.3	10	5	0.2	3.5	-	50	0.6	±30	125
ESDSBULC3V3AE2	0201-A	1	Bidirectional	3.3	10	9.6	0.5	4	-	96	0.55	±30	125
ESDH3V3AE2	0201-A	1	Bidirectional	3.3	20	8.5	0.1	3.5	-	170	35	±30	125
ESDULC3V6AE2	0201-A	1	Bidirectional	3.6	2.5	14	0.2	5	-	35	0.25	±20	125
ESDULC5V0AE2	0201-A	1	Bidirectional	5	1	11	0.1	6	-	11	3	±15/±8	125
ESDSBLC5V0AE2	0201-A	1	Bidirectional	5	4	14	0.05	6	-	44	0.5	±15	125
ESDHSLC5V0AE2	0201-A	1	Unidirectional	5	5	12	0.5	6	-	60	0.5	±25/±20	125
ESDLC5V0AE2	0201-A	1	Bidirectional	5	5	25	0.1	6.5	9.5	125	0.32	±20	125
ESDULC5V0AE2	0201-A	1	Unidirectional	5	5	15	0.5	6	-	75	0.8	±25/±20	125
ESDLSBULC5V0AE2	0201-A	1	Bidirectional	5	5.5	10	0.2	5.8	9.5	55	0.35	±30	125
ESDLSB5V0AE2	0201-A	1	Bidirectional	5	6	10	0.5	6	-	55	18	±30	125
ESD5V0AE2	0201-A	1	Unidirectional	5	8	12	0.2	6	8.5	100	60	±30	125
ESDLC5V0AE2	0201-A	1	Bidirectional	5	8	15	0.1	6	9	120	15	±15/±8	125
ESDSBL5V0AE2	0201-A	1	Bidirectional	5	8	12	0.1	6	-	96	13	±30	125
ESDSBULC5V0AE2	0201-A	1	Bidirectional	5	13	10	0.2	6	-	130	0.5	±30	85
ESDPLC5V0AE2	0201-A	1	Bidirectional	5.5	3	15	0.05	6	9	40	0.2	±20	150
ESDSB5V5AE2	0201-A	1	Bidirectional	5.5	6	12	0.1	6.1	-	72	13	±30	125
ESDSBLC5V5AE2	0201-A	1	Bidirectional	5.5	6	12	0.2	6	8	70	9	±30	125
ESDULC7V0AE2	0201-A	1	Bidirectional	7	2.5	15	0.2	8.5	-	37.5	0.2	±25/±20	125
ESDLC7V0AE2	0201-A	1	Bidirectional	7	6	17	0.2	7.5	-	100	15	±30	125
ESDSB7V0AE2	0201-A	1	Bidirectional	7	6	14	0.1	7.2	10.5	84	13	±30	125
ESDSBLC8V0AE2	0201-A	1	Bidirectional	8	4	18	0.2	9	-	70	5	±30	125
ESDULC8V0AE2	0201-A	1	Unidirectional	8	4	25	0.2	8.5	-	100	0.3	±20	125
ESDULC12VAE2	0201-A	1	Bidirectional	12	3	33	0.2	13.3	-	100	0.2	±25/±22	125
ESDLC12VAE2	0201-A	1	Bidirectional	12	5	20	0.2	13.3	-	100	10	±30	125
ESD12VAE2	0201-A	1	Unidirectional	12	8	20	0.1	12.9	16	160	40	±30	125
ESDHLC12VAE2	0201-A	1	Bidirectional	12	10	22	0.1	13	-	242	13	±30	125
ESDSBLC15VAE2	0201-A	1	Bidirectional	15	6	23	0.1	15.5	20	140	7	±30	125
ESDLC18VAE2	0201-A	1	Bidirectional	18	2.5	44	0.2	19.5	-	110	8	±20	125
ESDSBSLC18VAE2	0201-A	1	Bidirectional	18	4	10	0.05	18.5	-	34	0.5	±18	125
ESDLC24VAE2	0201-A	1	Bidirectional	24	1.5	53	0.5	26.5	-	80	0.3	±15/±8	125
ESD24VAE2	0201-A	1	Unidirectional	24	2	45	0.2	27	-	90	10	±15/±8	125
ESDSBLC24VAE2	0201-A	1	Bidirectional	24	4	9	0.05	25	-	36	0.5	±15	125
ESDLSBLC24VAE2	0201-A	1	Bidirectional	24	5	36	0.2	27	-	180	5	±30	125
CSP5V0WB	CSP01005	1	Bidirectional	5	14	9	0.2	5.5	8	115	25	±30	125
CSPSBULC1V5AE	CSP0201	1	Bidirectional	1.5	4	3.25	0.1	4.5	8	13	0.2	±15/±12	125

Protection Devices

ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RWM} (V)	I _{PP} (A)	V _C (V)	I _{RS} (uA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
CSPSBULC3V3AE	CSP0201	1	Bidirectional	3.3	4	3.25	0.1	4.5	8	13	0.2	±15/±12	125
CSPULC3V3AE	CSP0201	1	Bidirectional	3.3	4.5	21	0.5	6	8.5	80	0.35	±20/±15	125
CSPHSB3V3AE	CSP0201	1	Bidirectional	3.3	20	8.5	0.5	3.7	5.5	170	30	±30	125
CSPSB3V3AE	CSP0201	1	Unidirectional	3.3	21	8	0.2	3.6	5	160	80	±30	125
CSPHSBULC5V0AE	CSP0201	1	Bidirectional	5	3	2.6	0.2	5.5	10	9	0.26	±15/±12	125
CSPSLC5V0AE	CSP0201	1	Bidirectional	5	3	20	0.5	6	9	60	0.25	±18/±12	125
CSPULC5V0AE	CSP0201	1	Bidirectional	5	3.5	21	0.5	6	9	70	0.45	±20/±15	125
CSPSBULC5V0AE	CSP0201	1	Bidirectional	5	5	8	0.2	8	14	35	0.5	±20/±15	125
CSPLC5V0AE	CSP0201	1	Bidirectional	5	9	10	0.5	5.8	-	90	20	±30	125
CSPSB5V0AE	CSP0201	1	Unidirectional	5	16	10.5	0.5	5.8	8	160	80	±30	125
CSP5V0AE	CSP0201	1	Bidirectional	5	18	9.5	0.5	6	-	140	30	±30	125
CSPL12VAE	CSP0201	1	Bidirectional	12	7	21	0.2	13	-	130	12	±30	125
CSPSBULC18VAE	CSP0201	1	Bidirectional	18	5	8	0.1	19	-	35	0.5	±15	125
CSPSBULC24VAE	CSP0201	1	Bidirectional	24	5	8	0.2	26	-	40	0.7	±15	125
CSPSBULC1V5LB	CSP1006-2	1	Bidirectional	1.5	4	3.25	0.1	4.5	8	13	0.25	±15/±12	125
CSPSBULC3V3LB	CSP1006-2	1	Bidirectional	3.3	4	3.25	0.1	4.5	8	13	0.25	±15/±12	125
CSPSLC3V3LB	CSP1006-2	1	Unidirectional	3.3	11	15	0.2	4	6	150	0.6	±30	125
CSPSLC3V3LB	CSP1006-2	1	Bidirectional	3.3	11	15	0.2	4	6	150	0.6	±30	125
CSPHSLC3V3LB	CSP1006-2	1	Bidirectional	3.3	20	20	0.2	4	6	350	0.6	±30	125
CSP3V3LB	CSP1006-2	1	Unidirectional	3.3	65	10.5	0.5	3.6	5.5	600	150	±30	125
CSPSB3V6LB	CSP1006-2	1	Bidirectional	3.6	90	8.2	1	3.8	6	720	200	±30	125
CSPSBHC4V5LB	CSP1006-2	1	Bidirectional	4.5	100	10.5	0.5	4.8	6.3	900	300	±30	125
CSPHC4V8LB	CSP1006-2	1	Unidirectional	4.8	90	15	0.5	5	-	1350	200	±30	125
CSPSBHC4V8LB	CSP1006-2	1	Bidirectional	4.8	100	16	0.5	5	7	1600	200	±30	125
CSPSLC5V0LB	CSP1006-2	1	Bidirectional	5	3	20	0.5	6	9	60	0.22	±20/±15	125
CSPLULC5V0LB	CSP1006-2	1	Bidirectional	5	3.5	20	0.2	6	9	70	0.5	±20/±15	125
CSPULC5V0LB	CSP1006-2	1	Bidirectional	5	4	22	0.5	6	8.5	80	0.45	±20/±15	125
CSPSBULC5V0LB	CSP1006-2	1	Bidirectional	5	5	8	0.2	8	14	35	0.5	±20/±15	125
CSPHSBULC5V0LB	CSP1006-2	1	Bidirectional	5	9	8	0.2	6	9	65	0.4	±20	125
CSPLC5V0LB	CSP1006-2	1	Bidirectional	5	18	9.5	0.5	6	-	140	30	±30	125
CSPSBULC5V0LB	CSP1006-2	1	Bidirectional	5	20	8	0.2	6	9	150	0.9	±30	125
CSP5V0LB	CSP1006-2	1	Unidirectional	5	50	10.5	0.5	5.8	8	500	130	±30	125
CSPH5V0LB	CSP1006-2	1	Bidirectional	5	100	10.5	0.5	5.5	7.5	900	300	±30	125
CSPSBHC6V3LB	CSP1006-2	1	Bidirectional	6.3	90	16.5	0.5	6.5	9.5	1485	200	±30	125
CSPH7V0LB	CSP1006-2	1	Unidirectional	7	45	15	0.5	8	-	700	185	±30	125
CSP8V0LB	CSP1006-2	1	Bidirectional	8	9	20	0.5	9	-	150	12	±30	125
CSP12VLB	CSP1006-2	1	Bidirectional	12	8	21	0.2	13	-	150	12	±30	125
CSPH12VL	CSP1006-2	1	Unidirectional	12	45	32	1	13	16.5	1300	150	±30	125
CSPSBULC18VLB	CSP1006-2	1	Bidirectional	18	5	8	0.1	19	25	35	0.8	±15	125
CSPSBULC24VLB	CSP1006-2	1	Bidirectional	24	5	8	0.2	26	-	40	0.7	±15	125
CSP36VLB	CSP1006-2	1	Bidirectional	36	7	61	0.5	38	-	400	40	±30	125
CSPSBULC3V3P6	CSP1610-6	2	Bidirectional	3.3	12	16.5	0.05	3.8	6	200	0.5	±30	125
ESDSBULC0104DFN10	DFN-10	4	Unidirectional	1.5	7	8	0.2	6	10	56	0.3	±15	125
ESDSBULC0104DFN10B	DFN-10	4	Bidirectional	1.5	7	8	0.2	6	10	56	0.22	±15	125

ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RWM} (V)	I _{PP} (A)	V _C (V)	I _R (μA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
ESDLC3324DFN10	DFN-10	4	Unidirectional	3.3	5	13	1	5	8	65	0.65	±15/±10	125
ESDSBULC3304DFN10	DFN-10	4	Unidirectional	3.3	7	8	0.2	6	10	56	0.3	±15	125
ESDSBULC3304DFN10B	DFN-10	4	Bidirectional	3.3	7	8	0.2	6	10	56	0.22	±15	125
ESDLC0534DFN10	DFN-10	4	Unidirectional	5	3	15	0.2	6	8.5	50	0.5	±25/±20	125
ESDLC0524DFN10	DFN-10	4	Unidirectional	5	5	18	0.9	6.1	8.5	150	0.8	±25	150
ESDLC0524F	DFN-10	4	Unidirectional	5	5	15	0.9	6.1	9.6	150	0.8	±25/±20	150
ESDSBULC0504DFN10	DFN-10	4	Unidirectional	5	7	8	0.2	6	10	56	0.3	±15	125
ESDSBULC0504DFN10B	DFN-10	4	Bidirectional	5	7	8	0.2	6	10	56	0.22	±15	125
ESD1V8LB	DFN1006-2	1	Bidirectional	1.8	12	8.5	0.2	2.5	-	100	30	±30	125
ESDH1V8LB	DFN1006-2	1	Bidirectional	1.8	38	8	0.2	2.5	-	300	80	±30	125
ESDSB2V5LB	DFN1006-2	1	Bidirectional	2.5	10	10	0.1	2.9	-	100	25	±30	85
ESD2V5L	DFN1006-2	1	Unidirectional	2.5	13	6.4	0.1	3	-	90	40	±30	125
ESDLC3V3LB	DFN1006-2	1	Bidirectional	3.3	1	11	0.1	4.3	6.8	20	3.1	±30	125
ESDSBLC3V3LB	DFN1006-2	1	Bidirectional	3.3	4	8.5	0.05	7	-	34	0.5	±30	125
ESDLC3V3LB	DFN1006-2	1	Bidirectional	3.3	5	20	0.05	5	-	100	0.3	±20/±25	125
ESDUSBULC3V3L	DFN1006-2	1	Unidirectional	3.3	5	10	0.1	5	8.5	50	0.3	±30	125
ESDL3V3LBA	DFN1006-2	1	Bidirectional	3.3	7	9	0.1	3.6	-	63	20	±30	125
ESDSBPLC3V3LB	DFN1006-2	1	Bidirectional	3.3	7	7.5	0.05	7	-	53	1	±30	125
ESDL3V3LB	DFN1006-2	1	Bidirectional	3.3	8	10	0.05	3.5	6.5	80	20	±30	125
ESDSBLC3V3LB	DFN1006-2	1	Bidirectional	3.3	9	10	0.1	3.5	-	90	13	±30	125
ESDLC3V3L	DFN1006-2	1	Unidirectional	3.3	10	15	0.5	3.5	-	150	20	±30	125
ESDLC3V3L	DFN1006-2	1	Unidirectional	3.3	10	13	1	5	7.5	130	0.75	±30	125
ESDSBLC3V3L	DFN1006-2	1	Unidirectional	3.3	18	5	0.05	8.5	-	90	2.5	±30	125
ESD3V3L	DFN1006-2	1	Unidirectional	3.3	20	15	1	4.2	6	300	250	±30	125
ESDHSBULC3V3LB	DFN1006-2	1	Bidirectional	3.3	26	10	0.5	5	-	260	1.5	±30	125
ESD3V3LB	DFN1006-2	1	Bidirectional	3.3	35	12	0.5	4	6.5	420	70	±30	125
ESDSB3V3LB	DFN1006-2	1	Bidirectional	3.3	60	10	1	3.8	-	600	110	±30	125
ESDULC3V6LB	DFN1006-2	1	Bidirectional	3.6	2.5	15	0.2	5	-	37.5	0.25	±20	125
ESD4V5LB	DFN1006-2	1	Bidirectional	4.5	45	12	0.5	4.8	6	540	100	±30	125
ESDULC5V0LB	DFN1006-2	1	Bidirectional	5	2	12.5	0.2	6	-	25	3	±20	125
ESDHULC5V0LB	DFN1006-2	1	Bidirectional	5	3	12	0.2	5.6	11	36	0.5	±25	125
ESDSBLC5V0LB	DFN1006-2	1	Bidirectional	5	3.5	12	0.1	5.3	-	41	4	±30	125
ESDLC5V0L	DFN1006-2	1	Unidirectional	5	4	16	0.1	6	-	80	0.7	±20	125
ESDLC5V0LB	DFN1006-2	1	Bidirectional	5	4	20	0.5	6	9	100	0.35	±25/±22	125
ESDHSBULC5V0LB	DFN1006-2	1	Bidirectional	5	5	7	0.2	6	10	35	0.6	±15	125
ESDLC5V0LU	DFN1006-2	1	Unidirectional	5	5	15	0.5	5.4	6.5	75	0.8	±25/±20	125
ESDLSBULC5V0LB	DFN1006-2	1	Bidirectional	5	5.5	10	0.2	5.8	9.5	55	0.35	±30	125
ESDLSB5V0LB	DFN1006-2	1	Bidirectional	5	6	10	0.5	6	-	55	18	±30	125
ESDSBULC5V0LB	DFN1006-2	1	Bidirectional	5	7	12	0.05	6	-	84	1	±30	125
ESDLSB5V0LBA	DFN1006-2	1	Bidirectional	5	8	12	0.1	5.3	-	96	20	±30	125
ESDSBL5V0LB	DFN1006-2	1	Bidirectional	5	8	10	0.1	5.3	7.5	96	13	±30	125
ESDHSLC5V0LB	DFN1006-2	1	Bidirectional	5	10	18	0.2	6	-	180	0.6	±30	85
ESDHSBLC5V0LB	DFN1006-2	1	Bidirectional	5	15	14	0.05	6	-	210	1.55	±30	125
ESDLSV0L	DFN1006-2	1	Unidirectional	5	15	14	0.2	6	-	200	100	±30	125

Protection Devices

ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RWM} (V)	I _{PP} (A)	V _C (V)	I _R (uA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
ESDSB5V0LB	DFN1006-2	1	Bidirectional	5	20	13	0.1	5.1	-	260	42	±30	125
ESD5V0LB	DFN1006-2	1	Bidirectional	5	25	16	0.5	6	9	400	100	±30/±25	125
ESDSHB5V0LB	DFN1006-2	1	Bidirectional	5	75	11.5	1	5.3	-	860	230	±30	125
ESDSBHC5V0LB	DFN1006-2	1	Bidirectional	5	90	16.5	0.5	6	9	1485	200	±30	125
ESDSBSLC5V0L	DFN1006-2	1	Unidirectional	5.5	3.6	14	0.1	7	9	42	0.65	±20	125
ESDSB5V5LB	DFN1006-2	1	Bidirectional	5.5	6	12	0.1	6.1	-	72	13	±30	125
ESDLC5V0LB	DFN1006-2	1	Bidirectional	5.5	8	10	0.2	6	8	80	20	±30	125
ESD6V3L	DFN1006-2	1	Unidirectional	6.3	32	12	0.3	6.8	-	350	150	±30	125
ESDULC7V0L	DFN1006-2	1	Unidirectional	7	2	13	0.2	8	-	26	0.2	±25/±20	125
ESD7V0LB	DFN1006-2	1	Bidirectional	7	5	16	0.2	7.5	-	80	15	±30	125
ESDSB7V0LB	DFN1006-2	1	Bidirectional	7	6	14	0.1	7.2	10.5	84	13	±30	125
ESD7V0L	DFN1006-2	1	Unidirectional	7	18	17	0.5	7.5	-	300	90	±30	150
ESDSHB7V0LB	DFN1006-2	1	Bidirectional	7	20	15	0.5	7.5	-	300	55	±30	125
ESDHC7V0L	DFN1006-2	1	Unidirectional	7	32	15	0.1	7.8	10	480	180	±30	125
ESDULC8V0LB	DFN1006-2	1	Bidirectional	8	3.5	26	0.2	9.5	11.5	90	0.5	±25/±20	125
ESDSL12VLB	DFN1006-2	1	Bidirectional	12	2.5	32	0.2	13.5	-	80	0.5	±25/±20	125
ESDLC12VLB	DFN1006-2	1	Bidirectional	12	5	20	0.2	13.3	-	100	7	±30	125
ESDSB12VLB	DFN1006-2	1	Bidirectional	12	7	14	1	12.5	-	98	10	±30	125
ESDSBLC12VLB	DFN1006-2	1	Bidirectional	12	7	22	0.1	13	-	120	7	±30	125
ESD12VL	DFN1006-2	1	Unidirectional	12	12	25	0.1	13.3	-	300	60	±30	125
ESD12VLB	DFN1006-2	1	Bidirectional	12	14	25	0.1	13.3	-	350	50	±30	125
ESDH12VL	DFN1006-2	1	Unidirectional	12	25	26	0.1	13	17	650	90	±30	125
ESDLC15VLB	DFN1006-2	1	Bidirectional	15	6	25	0.2	16.2	-	150	5	±30	125
ESDSBLC15VLB	DFN1006-2	1	Bidirectional	15	6	23	0.1	15.5	20	140	5	±30	125
ESD15VL	DFN1006-2	1	Unidirectional	15	10	30	0.5	16.7	20	300	65	±30	125
ESDSB15VLB	DFN1006-2	1	Bidirectional	15	22	26	0.2	16	-	570	35	±30	125
ESDSL16VLB	DFN1006-2	1	Bidirectional	16	1	30	0.1	18	-	30	0.9	±15/±8	125
ESDULC1610LB	DFN1006-2	1	Asymmetric	16	16	23	0.5	15.6	-	50	0.3	±20/±15	125
ESDSL18VLB	DFN1006-2	1	Bidirectional	18	2	40	0.2	19	-	80	0.3	±25/±15	125
ESDSBSLC18VLB	DFN1006-2	1	Bidirectional	18	4	10	0.05	18.5	-	40	0.5	±15	125
ESD18VLB	DFN1006-2	1	Bidirectional	18	7	42	0.2	20	-	300	20	±30	125
ESDSL24VLB	DFN1006-2	1	Bidirectional	24	1.5	53	0.5	26.5	-	80	0.3	±15/±8	125
ESD24VL	DFN1006-2	1	Unidirectional	24	5	55	0.3	26	-	250	35	±25/±20	125
ESD24VLB	DFN1006-2	1	Bidirectional	24	5	40	0.1	27	-	300	20	±30/±25	125
ESDSBLC24VLB	DFN1006-2	1	Bidirectional	24	5	36	0.2	27	-	180	5	±30	125
ESDSBLC48VLB	DFN1006-2	1	Bidirectional	48	60	4	0.5	50	68	240	5	±30	125
ESD0512LB	DFN1006-2	1	Asymmetric	12, 5	10	20	0.2	13, 6	17, 10	200	40	±30	125
ESD2V1L	DFN1006-2L	1	Unidirectional	2.1	14	9	1	2.5	6	120	21	±30	125
ESDLC5V0L2B	DFN1006-2L	1	Bidirectional	5	5	15	0.5	5.6	-	75	15	±30	150
ESDSL5V0L2B	DFN1006-2L	1	Bidirectional	5.5	3	15	0.05	6.1	8.8	40	0.2	±20	150
ESDSL5V0LTB	DFN1006-3	2	Unidirectional	5	5	15	0.1	6.4	-	75	0.8	±25/±20	125
ESDSB5V0LTB	DFN1006-3	2	Bidirectional	5	8	12	0.1	5.3	-	96	11	±30	125
ESDSBSLC3V3LT	DFN1006-3B	2	Unidirectional	3.3	13	5	0.2	3.5	-	65	1	±30	125
ESDLSB5V0LTBA	DFN1006-3B	2	Bidirectional	5	8	12	0.1	5.3	-	96	20	±30	125

ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RWM} (V)	I _{PP} (A)	V _C (V)	I _R (μA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
ESDSB5LC5V0LT	DFN1006-3B	2	Unidirectional	5	13	5	0.2	6	-	65	0.65	±30	125
ESD5V0PW	DFN1308-5	4	Unidirectional	5	3	12	0.1	6.5	9	36	0.45	±20/±15	125
SRL05P7	DFN1510-6	4	Unidirectional	5	5	17	0.9	6.1	9.6	90	0.8	±20/±15	150
ESD0551P1	DFN1608-2	1	Unidirectional	5	80	15	1	6	-	1200	700	±30	125
ESDHC12VP1	DFN1608-2	1	Unidirectional	12	45	22	0.5	12	-	990	260	±30	125
ESD1531P1	DFN1608-2	1	Unidirectional	15	20	35	0.5	16.5	-	700	100	±30	125
ESD24VP1	DFN1608-2	1	Unidirectional	24	20	48	0.5	26	-	960	120	±30	125
ESD5LC3V3P6B	DFN1610-2	1	Bidirectional	3.3	25	16	0.2	3.8	-	400	1.5	±30	125
ESD4571P6	DFN1610-2	1	Unidirectional	4.5	180	18	0.2	4.8	-	3200	400	±30	125
ESDSBHC4V5P6B	DFN1610-2	1	Bidirectional	4.5	195	18	0.5	4.8	-	3510	400	±30	125
ESD0571P6	DFN1610-2	1	Unidirectional	5	125	15	1	6	-	1875	960	±30	125
ESD0552P6	DFN1610-2	1	Unidirectional	5	160	14	1	5.2	7	2400	500	±30	125
ESDSBHC6V3P6B	DFN1610-2	1	Bidirectional	6.3	155	17	0.5	6.5	-	2635	370	±30	125
ESD0751P6	DFN1610-2	1	Unidirectional	7	100	17	1	8	10	1800	900	±30	125
ESD0771P6	DFN1610-2	1	Unidirectional	7	115	16.5	0.5	7.5	-	1875	550	±30	125
ESDULC8V0P6B	DFN1610-2	1	Bidirectional	8	12	20	0.2	8.5	-	240	0.6	±30	125
ESD1051P6	DFN1610-2	1	Unidirectional	10	86	20	1	10.7	12.3	1800	650	±30	125
ESD1251P6	DFN1610-2	1	Unidirectional	12	75	22	1	12.8	14.6	1800	510	±30	125
ESD1271P6	DFN1610-2	1	Unidirectional	12	75	25	0.1	12.6	-	1875	500	±30	125
ESD1551P6	DFN1610-2	1	Unidirectional	15	60	30	1	15.5	18	1800	380	±30	125
ESD1851P6	DFN1610-2	1	Unidirectional	18	50	35	1	19.2	22.5	1800	310	±30	125
ESD2471P6	DFN1610-2	1	Unidirectional	24	35	53.5	0.1	26.7	-	1875	200	±30	125
ESD2451P6	DFN1610-2	1	Unidirectional	24	40	43	1	24.7	-	1800	250	±30	125
ESD3671P6	DFN1610-2	1	Unidirectional	36	25	75	0.5	37	-	1875	150	±30	125
ESDLC0502P6	DFN1610-6	2	Unidirectional	5	5	15	0.5	6	-	75	0.8	±30/±25	125
ESDLC0524P3	DFN1616-6	4	Unidirectional	5	17	14	0.1	6.5	9	230	1.3	±30	125
ESDLC0504P3	DFN1616-6	3	Unidirectional	5.5	5	12	0.5	6.5	-	60	0.4	±30/±25	125
ESDLC3603P3	DFN1616-6	3	Unidirectional	5.5	5	20	0.5	6.5	-	100	0.5	±25/±20	125
ESDLC0554P3	DFN1616-6L	4	Unidirectional	5.5	11	22	0.1	6	7.8	240	2	±30	125
ESDULC5V0PHWF	DFN2010-5(SWF)	4	Bidirectional	5	3	20	0.2	6	-	50	0.3	±15/±8	125
ESDHC22VPF	DFN2018-6L	1	Unidirectional	22	100	35	1	24	26	3400	850	±30	125
ESD4V5P4	DFN2020-3L	1	Unidirectional	4.5	280	18	2	4.8	-	5000	680	±30	125
ESD4V5P4B	DFN2020-3L	1	Bidirectional	4.5	300	20	1	4.8	-	6000	350	±30	125
ESD7V0P4	DFN2020-3L	1	Unidirectional	7.5	275	22	1	8	-	6000	1500	±30	125
ESD1051P4	DFN2020-3L	1	Unidirectional	10	205	21	1	10.5	12.5	4500	2600	±30	125
ESD1251P4	DFN2020-3L	1	Unidirectional	12	200	24	0.1	12.5	15	4500	2000	±30	125
ESD12VP4	DFN2020-3L	1	Unidirectional	12	200	30	1	13	-	6000	550	±30	125
ESDHC12VP4	DFN2020-3L	1	Unidirectional	12	200	24	0.5	12.8	15	5000	1080	±30	125
ESDHHC12VP4	DFN2020-3L	1	Unidirectional	12	200	27	1	12.5	15.5	5000	1400	±30	125
ESD1551P4	DFN2020-3L	1	Unidirectional	15	160	28	0.1	15.5	18	4500	1500	±30	125
ESDHC15VP4	DFN2020-3L	1	Unidirectional	15	170	35	0.5	16	19	5000	1050	±30	125
ESDHHC15VP4	DFN2020-3L	1	Unidirectional	15	180	30	1	15.5	19	5000	1200	±30	125
ESD1851P4	DFN2020-3L	1	Unidirectional	18	150	33	0.1	18.5	21	4500	1200	±30	125
ESDHC18VP4	DFN2020-3L	1	Unidirectional	18	150	38	0.5	19	22	5000	950	±30	125

Protection Devices

ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RWM} (V)	I _{PP} (A)	V _C (V)	I _{RS} (uA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
ESD2451P4	DFN2020-3L	1	Unidirectional	24	120	38	0.1	24.5	28	4500	1000	±30	125
ESDHC24VP4	DFN2020-3L	1	Unidirectional	24	120	60	0.5	25	30	5000	800	±30	125
ESDHHC24VP4	DFN2020-3L	1	Unidirectional	24	220	33	1	25.5	29	7260	750	±30	125
ESDHC36VP4	DFN2020-3L	1	Unidirectional	36	75	65	1	36.8	-	4875	470	±30	125
ESDULC3324P5	DFN2510-10	4	Unidirectional	3.3	3	13	0.5	5.5	7.5	40	0.34	±25/±20	125
ESDSBULC3304P5	DFN2510-10	4	Unidirectional	3.3	5	10	0.1	5	8.5	50	0.3	±30	125
ESDULC0534P5	DFN2510-10	4	Bidirectional	5	3	15	0.5	6	-	45	0.19	±20	125
ESDULC0524P5	DFN2510-10	4	Unidirectional	5	4.5	12	0.1	7	-	54	0.4	±20	125
ESDSBLC2424P5	DFN2510-10	4	Bidirectional	24	5	32	0.2	26.5	36	160	9	±30	125
ESDLC2504P8	DFN2626-10	4	Unidirectional	2.5	35	15	0.2	2.7	-	375	5	±30	125
ESDLC3304P8	DFN2626-10	4	Unidirectional	3.3	25	18	0.5	3.5	-	450	2	±25/±15	125
ESDLC3304P9	DFN3020-10	4	Unidirectional	3.3	40	25	0.5	3.5	-	1000	5	±30	125
ESDLC5V0PA6	DFN4120-10	6	Unidirectional	5	4	25	0.5	6	-	100	0.4	±15/±8	125
ESDULC5V0PA6	DFN4120-10	6	Unidirectional	5	5	16	0.5	6	-	80	0.4	±25/±20	125
ESDULC3V3PRB	DFN5515-18	8	Unidirectional	3.3	3	15	0.2	3.5	-	45	0.25	±20	125
ESD3V3D3A	SOD-323	1	Unidirectional	3.3	18	12	0.5	4.5	-	200	200	±30	125
ESDSBLC3V3D3	SOD-323	1	Unidirectional	3.3	18	7.5	0.05	8.5	-	135	3	±30	125
ESDSL3V3D3B	SOD-323	1	Bidirectional	3.3	20	8	0.1	4	-	350	1.5	±30	150
GBLC03CD3B	SOD-323	1	Bidirectional	3.3	21	20	0.5	4.2	-	350	0.5	±25/±20	125
ESD3V3D3BA	SOD-323	1	Bidirectional	3.3	29	11	0.5	3.7	6	320	70	±30	125
ESD3V3D3B	SOD-323	1	Bidirectional	3.3	30	17	0.5	4.2	6	500	200	±30	125
ESDH3V3D3	SOD-323	1	Unidirectional	3.3	35	11.5	0.5	3.8	7	400	110	±30	125
ESDSB3V3D3B	SOD-323	1	Bidirectional	3.3	35	13	0.5	4	6.5	400	80	±30	125
ESDN4V5D3B	SOD-323	1	Bidirectional	4.5	135	15	1	4.7	-	2000	300	±30	125
ESDSBSLC5V0D3B	SOD-323	1	Bidirectional	5	7	11	0.05	6	-	77	0.8	±30	125
ESD5V0D3B	SOD-323	1	Bidirectional	5	8	15	1	5.8	8.8	120	27	±25	150
ESD5V0D3	SOD-323	1	Unidirectional	5	15	15.5	1	6.2	7.3	350	350	±15/±8	150
ESD5V0D3A	SOD-323	1	Unidirectional	5	15	14	0.5	6.2	-	200	140	±30	125
ESDSL5V0D3B	SOD-323	1	Bidirectional	5	18	20	0.5	6	-	350	1.5	±30	125
GBLC05CD3B	SOD-323	1	Bidirectional	5	18	22	0.5	6.1	-	350	0.5	±25/±20	125
ESDLC5V0D3	SOD-323	1	Unidirectional	5	21	32	1	6	-	600	5	±30	150
ESDH5V0D3	SOD-323	1	Unidirectional	5	30	20	1	5.5	7.5	600	220	±30KV	125
ESDH5V0D3BA	SOD-323	1	Bidirectional	5	30	12	1	5.5	8	360	80	±25	125
SD05CH	SOD-323	1	Bidirectional	5	34	15	0.2	6	-	500	200	±30	125
SD05	SOD-323	1	Unidirectional	5	40	12.5	1	6	-	500	350	±30	125
ESDN5V0D3B	SOD-323	1	Bidirectional	5	120	13.5	0.5	6	-	1620	300	±30	125
ESDSL8V0D3B	SOD-323	1	Bidirectional	8	18	19.5	0.2	8.5	10	350	1.5	±30	150
GBLC08CD3B	SOD-323	1	Bidirectional	8	21	26	0.5	9.4	-	350	0.5	±25/±20	125
SD08CH	SOD-323	1	Bidirectional	8	30	18	0.2	8.5	-	500	120	±30	125
ESD12VD3B	SOD-323	1	Bidirectional	12	1	15.5	1	13.5	-	350	100	±30	150
ESD12VD3A	SOD-323	1	Unidirectional	12	10	28	0.5	13.3	-	200	55	±30	125
ESD12VD3BA	SOD-323	1	Bidirectional	12	10	28	1	13	-	250	30	±30	150
ESD12VD3	SOD-323	1	Unidirectional	12	12	33	1	13.3	15.75	350	150	±30	150
ESDULC12VD3B	SOD-323	1	Bidirectional	12	12	29	0.2	13.3	17.8	500	1.5	±30	125

ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RRM} (V)	I _{PP} (A)	V _C (V)	I _R (uA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
SD12C	SOD-323	1	Bidirectional	12	18	28	0.2	13.3	-	500	100	±30	125
ESDSLC12VD3B	SOD-323	1	Bidirectional	12	19	28	0.2	13.3	-	500	1	±30	125
ESD1524D3B	SOD-323	1	Asymmetric	15	5	35	0.05	17.1	-	160	13	±30	85
ESD15VD3A	SOD-323	1	Unidirectional	15	8	35	0.5	16.5	-	200	45	±30	125
ESD15VD3BA	SOD-323	1	Bidirectional	15	9	38	1	15.5	-	250	22	±30	150
ESDSLC15VD3B	SOD-323	1	Bidirectional	15	10	30	0.2	16.7	-	300	1.5	±30	125
SD15CH	SOD-323	1	Bidirectional	15	16	31	0.2	16.7	-	500	80	±30	125
ESD18VD3A	SOD-323	1	Unidirectional	18	8	38	0.5	19	-	200	39	±30	125
ESD18VD3BA	SOD-323	1	Bidirectional	18	8	40	1	19	-	250	20	±30	150
ESDSLC18VD3B	SOD-323	1	Bidirectional	18	8	45	0.2	19.8	25	350	3	±30	125
ESDSLC24VD3B	SOD-323	1	Bidirectional	24	6	55	0.2	27	-	360	1.5	±30	125
GBLC24CD3B	SOD-323	1	Bidirectional	24	6	58	0.5	26.1	-	350	0.5	±25/±20	125
ESD24VD3A	SOD-323	1	Unidirectional	24	7	50	0.5	25	-	200	50	±30	125
ESD24VD3BA	SOD-323	1	Bidirectional	24	7	44	1	26	-	250	20	±30	150
SD24C	SOD-323	1	Bidirectional	24	8	62	1	26.7	-	450	50	-	125
ESDSLC36VD3B	SOD-323	1	Bidirectional	36	4.5	75	0.2	38	-	340	0.8	±25	125
ESD36VD3A	SOD-323	1	Unidirectional	36	5	75	0.5	40	-	200	24	±30	125
ESD36VD3BA	SOD-323	1	Bidirectional	36	5	75	1	39	-	250	13	±30	150
SD36CH	SOD-323	1	Bidirectional	36	6	50	0.2	38	-	500	30	±30	125
ESDULC3V3D5B	SOD-523	1	Bidirectional	3.3	4	25	0.2	5	-	100	0.3	±20	125
ESD3V3D5B	SOD-523	1	Bidirectional	3.3	8	12	0.5	4.2	6.5	96	16	±30	125
ESDLC3V3D5	SOD-523	1	Unidirectional	3.3	11	14.5	0.1	3.5	-	155	20	±30	125
ESDSB3V3D5B-T3P	SOD-523	1	Bidirectional	3.3	13	9	0.1	3.5	-	140	28	±30	125
ESD3V3D5	SOD-523	1	Unidirectional	3.3	16	13	0.08	5	-	220	105	±30	150
ESD3V3D5BA	SOD-523	1	Bidirectional	3.3	18	10	0.5	3.7	6	180	60	±30	125
ESDULC5V0D5B	SOD-523	1	Bidirectional	5	2	12	0.2	6	9	24	0.4	±20	125
ESDLC5V0D5B	SOD-523	1	Bidirectional	5	5	12	0.1	5.8	7.8	150	15	±25	150
ESDSLC5V0D5	SOD-523	1	Unidirectional	5	5	16	0.5	6	-	80	0.7	±25	125
ESD5V0D5	SOD-523	1	Unidirectional	5	9.4	18.6	0.05	6.2	-	174	80	±30	150
ESD5V0D5B	SOD-523	1	Bidirectional	5	12	13	1	5.8	8.8	150	27	±30	150
ESD5V0D5BS	SOD-523	1	Bidirectional	5	15	14	0.01	6	8	200	50	±30	125
ESDH5V0D5	SOD-523	1	Unidirectional	5	22	14	0.5	6	-	300	160	±30	125
ESD7V0D5	SOD-523	1	Unidirectional	7	8.8	22.7	0.03	7.5	-	200	65	±30	150
ESD12VD5	SOD-523	1	Unidirectional	12	9.6	25	0.02	14.1	-	240	55	±30	150
ESD15VD5	SOD-523	1	Unidirectional	15	11	32	0.2	18	23	350	80	±30	125
ESDSBLC20VD5B	SOD-523	1	Bidirectional	20	4	36	0.1	24	31.5	145	5	±30	125
ESDSBLC24VD5B	SOD-523	1	Bidirectional	24	5	32	0.5	25	-	160	5	±30	125
ESD24VD5	SOD-523	1	Unidirectional	24	7.5	44	1	26.7	33	330	36	±25	150
ESD36VD5	SOD-523	1	Unidirectional	36	5	75	0.5	38	46	350	24	±30	125
ESD3V3D9B	SOD-923	1	Bidirectional	3.3	1	8	1	4	-	80	8	±30	150
ESD3V3D9	SOD-923	1	Unidirectional	3.3	5	8.8	1	5	-	100	50	±15/±8	150
ESDLC5V0D9	SOD-923	1	Unidirectional	5	1	9.8	1	5.4	8.5	100	0.5	±15/±8	150
ESDLC5V0D9B	SOD-923	1	Bidirectional	5	1.5	12	1	5.6	7.8		2.1	±15/±8	150
ESD5V0D9	SOD-923	1	Unidirectional	5	5	11	1	6	7.2	100	40	±15/±8	150

Protection Devices

ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RWM} (V)	I _{PP} (A)	V _C (V)	I _R (μA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
ESDLC5V0D9L	SOD-923	1	Unidirectional	5	5	15	0.5	5.4	6.5	75	0.9	±25/±20	125
ESD12VD9	SOD-923	1	Unidirectional	12	1	18.4	1	13.5	-	100	15	±30	150
SLVU2.8-4	SOP-8	4	Unidirectional	2.8	30	20	1	3	-	600	3	±30	125
LC03-3.3	SOP-8	2	Unidirectional	3.3	150	48	0.5	3.5	-	7200	16	±30	125
ESDSL5CV0T1	SOT-143	2	Unidirectional	5	4	16	1	6	9	50	0.3	±25/±20	150
LSR05	SOT-143	3	Unidirectional	5	5	12	0.5	6	-	90	0.4	±30	125
SR05	SOT-143	3	Unidirectional	5	25	20	0.5	6	-	500	6	±30	125
SR70	SOT-143	2	Unidirectional	70	24	7	5	85	-	168	10	±15/±8	150
MMBZ6V2A	SOT-23	2	Unidirectional	3	2.76	8.7	0.5	5.89	6.51	24	275	±30	150
MMBZ6V2C	SOT-23	2	Unidirectional	3	2.76	8.7	0.5	5.89	6.51	24	275	±30	150
MMBZ5V6A	SOT-23	2	Unidirectional	3	3	8	5	5.32	5.88	24	315	±30	150
MMBZ5V6C	SOT-23	2	Unidirectional	3	3	8	5	5.32	5.88	24	315	±30	150
ESD3V3AP	SOT-23	2	Unidirectional	3.3	13.3	7.5	10	5	5.9	300	150	±15/±8	150
SM3.3	SOT-23	2	Unidirectional	3.3	18	20	1.5	5.2	6	360	200	±17/±20	125
ESD3V3T2B	SOT-23	2	Bidirectional	3.3	25	16	0.5	5	-	250	100	±30	150
SM3.3B	SOT-23	2	Bidirectional	3.3	25	10	1.5	4	6.5	350	100	±30	150
SM3.3H	SOT-23	2	Unidirectional	3.3	40	12.5	0.5	3.5	-	500	260	±30	125
MMBZ6V8A	SOT-23	2	Unidirectional	4.5	2.5	9.6	0.5	6.46	7.14	24	250	±30	150
MMBZ6V8C	SOT-23	2	Unidirectional	4.5	2.5	9.6	0.5	6.46	7.14	24	250	±30	150
ESDL5V0T2B	SOT-23	2	Bidirectional	5	2	14	0.2	5.6	9.5	28	5	±15/±8	125
ESDULC5V0T2	SOT-23	2	Unidirectional	5	3.5	12	0.1	7	9	42	0.65	±20	125
ESDSL5CV0T2	SOT-23	2	Unidirectional	5	5	20	0.5	6	-	100	0.4	±20/±15	150
SM05	SOT-23	2	Unidirectional	5	12	9.8	10	6.2	7.3	300	110	±15/±8	150
ESD5V0ET2	SOT-23	2	Unidirectional	5	20	15	1	6	-	250	140	±30	150
ESD5V0T2	SOT-23	2	Unidirectional	5	20	15	1	6	-	250	140	±30	150
SM05B	SOT-23	2	Bidirectional	5	20	15	1	6	-	300	80	±30	125
HSM05	SOT-23	2	Unidirectional	5	23	14	0.5	6	-	320	160	±30	125
ESDA6V1L	SOT-23	2	Unidirectional	5.25	18.5	16.5	20	6.1	7.2	300	140		150
MMBZ9V1A	SOT-23	2	Unidirectional	6	1.7	14	0.3	8.65	9.56	24	185	±30	150
MMBZ9V1C	SOT-23	2	Unidirectional	6	1.7	14	0.3	8.65	9.56	24	185	±30	150
ESD7V0T2B	SOT-23	2	Bidirectional	7	17	15	0.5	7.5	-	250	65	±30	150
MMBZ12VA	SOT-23	2	Unidirectional	8.5	2.35	17	0.05	11.3	13	40	114	±30	150
MMBZ12VC	SOT-23	2	Unidirectional	8.5	2.35	17	0.05	11.3	13	40	114	±30	150
MMBZ15VA	SOT-23	2	Unidirectional	12	1.9	21	0.05	14.25	15.75	40	95	±30	150
MMBZ15VC	SOT-23	2	Unidirectional	12	1.9	21	0.05	14.25	15.75	40	95	±30	150
ESD12VET2	SOT-23	2	Unidirectional	12	10	28	1	13	-	250	55	±30	150
ESD12VT2	SOT-23	2	Unidirectional	12	10	28	1	13	-	250	55	±30	150
ESD12VT2B	SOT-23	2	Bidirectional	12	10	30	0.5	13	-	250	35	±30	150
SM12B	SOT-23	2	Bidirectional	12	10	30	0.5	13.3	-	300	32	±30	125
SM12	SOT-23	2	Unidirectional	12	11.2	19	1	13.3	15.75	300	60	±15/±8	150
LSM712	SOT-23	2	Asymmetric	12	12	20	0.5	13.3	-	240	25	±30	125
SM712	SOT-23	2	Asymmetric	12	13	25	1	13.3	-	400	45	±30	150
ESDH12VT2	SOT-23	2	Unidirectional	12	25	26	0.1	13	17	650	110	±30	125
SM712H	SOT-23	2	Asymmetric	12	36	28	0.1	13.3	-	1000	75	±30	125

ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V _{RWM} (V)	I _{PP} (A)	V _C (V)	I _{RS} (μA)	V _{BR} (V) Min	V _{BR} (V) Max	P _{PK} (W)	C _J (pF)	V _{ESD} (kV)	T _J (°C)
MMBZ16VA	SOT-23	2	Unidirectional	13	1.7	23	0.05	15.2	16.8	40	90	±30	150
MMBZ16VC	SOT-23	2	Unidirectional	13	1.7	23	0.05	15.2	16.8	40	90	±30	150
MMBZ18VA	SOT-23	2	Unidirectional	14.5	1.6	25	0.05	17	18.9	40	80	±30	150
MMBZ18VC	SOT-23	2	Unidirectional	14.5	1.6	25	0.05	17	18.9	40	80	±30	150
SM15B	SOT-23	2	Bidirectional	15	8	35	0.2	17	-	300	25	±30	125
ESD15VET2	SOT-23	2	Unidirectional	15	9	38	1	15.5	-	250	45	±30	150
ESD15VT2	SOT-23	2	Unidirectional	15	9	38	1	15.5	-	250	45	±30	150
ESD15VT2B	SOT-23	2	Bidirectional	15	9	30	0.5	16	-	250	30	±30	150
SM15H	SOT-23	2	Unidirectional	15	20	32	0.2	16.7	-	500	90	±30	125
MMBZ20VA	SOT-23	2	Unidirectional	17	1.4	28	0.05	19	21	40	77	±30	150
MMBZ20VC	SOT-23	2	Unidirectional	17	1.4	28	0.05	19	21	40	77	±30	150
MMBZ27VA	SOT-23	2	Unidirectional	22	1	40	0.05	25.65	28.35	40	70	±30	150
MMBZ27VC	SOT-23	2	Unidirectional	22	1	40	0.05	25.65	28.35	40	70	±30	150
SM22	SOT-23	2	Unidirectional	22	3	44	1	27	-	300	80	±15/±8	125
SM24B	SOT-23	2	Bidirectional	24	5	60	0.2	27	-	300	15	±30	125
ESD24VET2	SOT-23	2	Unidirectional	24	7	44	1	26	-	250	36	±30	150
ESD24VT2	SOT-23	2	Unidirectional	24	7	44	1	26	-	250	36	±30	150
ESD24VT2B	SOT-23	2	Bidirectional	24	7	44	0.5	26	-	250	20	±30	150
ESDHL24VT2B	SOT-23	2	Bidirectional	24	9	50	0.5	26	-	400	30	±30	125
ESDSBLC24VT2B	SOT-23	2	Bidirectional	24	10	32	0.2	25	-	320	9	±30	125
HSM24B	SOT-23	2	Bidirectional	24	13	34.5	0.2	25	-	450	15	±30	125
MMBZ33VA	SOT-23	2	Unidirectional	26	0.87	46	0.05	31.35	34.55	40	50	±30	150
MMBZ33VC	SOT-23	2	Unidirectional	26	0.87	46	0.05	31.35	34.55	40	50	±30	150
ESD27VT2B	SOT-23	2	Bidirectional	27	6	70	0.5	31	-	250	15	±30	150
MMBZ39VA	SOT-23	2	Unidirectional	31.2	0.76	53	0.05	36	42	38	42	±30	150
MMBZ39VC	SOT-23	2	Unidirectional	31.2	0.76	53	0.05	36	42	38	42	±30	150
SM32B	SOT-23	2	Bidirectional	32	4.5	67	0.2	35.6	-	300	25	±30	125
SM36	SOT-23	2	Unidirectional	36	3	80	1	40	48	240	30	±12	125
SM36B	SOT-23	2	Bidirectional	36	3	90	0.2	38	-	300	15	±30	125
ESD36VET2	SOT-23	2	Unidirectional	36	5	75	1	39	-	250	24	±30	150
ESD36VT2	SOT-23	2	Unidirectional	36	5	75	1	39	-	250	24	±30	150
ESD36VT2B	SOT-23	2	Bidirectional	36	5	90	0.5	38	-	250	13	±30	150
MMBZ47VA	SOT-23	2	Unidirectional	38	0.74	54	0.05	44.65	49.35	40	36	±30	150
MMBZ47VC	SOT-23	2	Unidirectional	38	0.74	54	0.05	44.65	49.35	40	36	±30	150
SRV33-4S	SOT23-6L	4	Unidirectional	3.3	11	11	0.5	3.6	7	100	0.9	±20/±15	125
SRV33-4L	SOT23-6L	4	Unidirectional	3.3	22	14	0.5	3.5	5.3	300	5	±30	125
SRV33-4H	SOT23-6L	4	Unidirectional	3.3	50	12	0.5	4.5	7	600	2	±30	125
SRV05-4E	SOT23-6L	4	Unidirectional	5	4.5	12	0.1	7	9	54	0.4	±25	125
SRL05	SOT23-6L	4	Unidirectional	5	5	17	0.9	6.1	9.6	90	0.8	±20/±15	150
ESDA6V1-4L	SOT23-6L	4	Bidirectional	5	6	14	0.2	6	-	80	20	±30	125
SRV05-4D	SOT23-6L	4	Unidirectional	5	6	12	0.1	7	9	72	0.8	±30	125
SRV05-4A	SOT23-6L	4	Unidirectional	5	12	25	5	6	-	300	3	±15/±8	150
SRV05-4C	SOT23-6L	4	Unidirectional	5	17	18	0.5	6	8.5	300	0.4	±20/±15	125
SRV05-4L	SOT23-6L	4	Unidirectional	5.5	12	17.5	1	6	-	350	1.5	±15/±8	150

Protection Devices

ESD Protection

Part Number	Package	Protected Lines	Configuration	Reverse Standoff Voltage	Max. Peak Pulse Current	Max. Clamping Voltage	Max. Reverse Leakage	Breakdown Voltage		Peak Power Dissipation	Junction Capacitance	IEC61000-4-2 Air/Contact	Operating Junction Temperature
				V_{RWM} (V)	I_{PP} (A)	V_C (V)	I_R (uA)	$V_{BR}(V)$ Min	$V_{BR}(V)$ Max	P_{PK} (W)	C_J (pF)	V_{ESD} (kV)	T_J (°C)
ESDSBLC24VT3B	SOT-323	2	Bidirectional	24	5	32	0.2	26.5	36	160	10	±30	125
ESDU5V0T5	SOT-523	2	Unidirectional	5	4	11	1	5.4	9.4	56	0.5	±20/±15	150
ESDSL5V0T5	SOT-523	2	Unidirectional	5	5	25	0.5	6	-	125	0.8	±20KV	125
ESDUL5V0M5	SOT-563	4	Unidirectional	5	3	15	0.5	6	-	45	0.8	±12	125
ESDU5V0M5	SOT-563	4	Unidirectional	5	3.5	25	1	6	10	90	0.8	±25	150

Programmable TSS

Part Number	Package	Maximum Voltage (Gate to Line)	Gate Triggering Current	Peak Pulse Current	Holding Current	Operating Junction Temperature
		V_{MGL} (V)	I_{GT} (mA)	I_{PP} (A)	I_H (mA)	T_J (°C)
P61089B	SOP-8	-167	5	50	150	150

TVS

Part Number	Package	Uni/Bi	Peak Pulse Power Dissipation	Reverse Standoff Voltage	Peak Pulse Current	Max. Clamping Voltage	Breakdown Voltage		Reverse Leakage	Operating Junction Temperature
			P _{PK} (W)	V _{SWR} (V)	I _{PP} (A)	V _C (V)	V _{BR} (V) Min	V _{BR} (V) Max	I _s (uA)	T _J (°C)
SMHE5.0A~SMHE90A	SOD-323HE-B	Uni	150	5.0~90	1.0~16.3	9.2~146	6.4~100	7.07~1	1.0~400	150
SMF5.0A~SMF200A	SOD-123FL	Uni	200	5.0~200	0.6~21.7	9.2~324	6.4~224	7.0~247	1~400	175
SMF5.0CA~SMF200CA	SOD-123FL	Bi	200	5.0~200	0.6~21.7	9.2~324	6.4~224	7.0~247	1~400	175
SMH5.0A~SMH100A	SOD-123HL	Uni	200	5.0~100	1.23~21.74	9.2~162	6.4~111	7.07~123	1~400	150
SMHEB6.5A~SMHEB58A	SOD-323HE-B	Uni	200	6.5~58	2.14~17.86	11.2~93.6	7.22~64.4	7.98~71.2	1~250	150
P4KE6.8A~P4KE550A	DO-41	Uni	400	5.8~495	0.52~39	10.5~760	6.45~522.5	7.14~577.5	1~1000	175
P4KE6.8CA~P4KE550CA	DO-41	Bi	400	5.8~495	0.52~39	10.5~760	6.45~522.5	7.14~577.5	1~1000	175
SM4F5.0A~SM4F100A	SOD-123FL	Uni	400	5.0~100	2.46~43.5	9.2~162	6.4~111	7.0~123	1~400	150
SM4F5.0CA~SM4F45CA	SOD-123FL	Bi	400	5.0~45	5.5~43.5	9.2~72.7	6.4~50	7.0~55.3	1~400	150
SM4H5.0A~SM4H100A	SOD-123FL	Uni	400	5.0~100	2.46~43.38	9.2~162	6.4~111	7.07~123	1~800	150
SMAF5.0A~SMAF300A	DO-221AC	Uni	400	5~300	0.8~43.5	9.2~486	6.4~335	7~371	1~800	175
SMAF5.0CA~SMAF300CA	DO-221AC	Bi	400	5~300	0.8~43.5	9.2~486	6.4~335	7~371	1~800	175
SMAJ5.0A~SMAJ220A	SMA	Uni	400	5~220	1.1~43.5	9.2~356	6.4~246	7~272	1~800	175
SMAJ5.0CA~SMAJ220CA	SMA	Bi	400	5~220	1.1~43.5	9.2~356	6.4~246	7~272	1~800	175
SMAJP4KE220AL~SMAJP4KE350AL	SMA	Uni	400	185~300	0.9~1.3	328~482	209~332	231~368	1	175
SMAJP4KE6.8A~SMAJP4KE220A	SMA	Uni	400	5.8~185	1.3~39	10.5~328	6.45~209	7.14~231	1~1000	175
SMAJP4KE6.8CA~SMAJP4KE220CA	SMA	Bi	400	5.8~185	1.3~39	10.5~328	6.45~209	7.14~231	1~1000	175
SMAJS24CA	SMA	Bi	400	24	10.3	38.9	26.7	29.5	1	150
P6KE6.8A~P6KE600A	DO-15	Uni	600	5.8~512	0.75~57	10.5~828	6.45~570	7.14~630	1~1000	175
P6KE6.8CA~P6KE600CA	DO-15	Bi	600	5.8~512	0.75~57	10.5~828	6.45~570	7.14~630	1~1000	175
SMA6J5.0AFL~SMA6J130AFL	DO-221AC	Uni	600	5~130	2.9~65.2	9.2~209	6.4~144	7~159	1~800	150
SMA6J11CAFL~SMA6J85CAFL	DO-221AC	Bi	600	11~85	4.4~33	18.2~137	12.2~94.4	13.5~104	1	150
SMA6J5.0A~SMA6J58A	SMA	Uni	600	5~58	6.41~65.2	9.2~93.6	6.4~64.4	7~71.2	1~800	175
SMA6J5.0CA~SMA6J58CA	SMA	Bi	600	5~58	6.41~65.2	9.2~93.6	6.4~64.4	7~71.2	1~800	175
SMBF5.0A~SMBF220A	SMBF	Uni	600	5.0~220	1.69~65.22	9.2~356	6.4~246	7.07~272	1~800	150
SMBF5.0CA~SMBF220CA	SMBF	Bi	600	5.0~220	1.69~65.22	9.2~356	6.4~246	7.07~272	1~800	150
SMBJ220AL~SMBJ440AL	SMB	Uni	600	220~400	0.9~1.7	356~648	246~447	272~494	1	175
SMBJ220CAL~SMBJ440CAL	SMB	Bi	600	220~440	0.9~1.7	356~713	246~492	272~543	1	175
SMBJ5.0A~SMBJ440A	SMB	Uni	600	5~440	0.9~65.2	9.2~713	6.4~492	7~543	1~800	175
SMBJ5.0CA~SMBJ440CA	SMB	Bi	600	5~440	0.9~65.2	9.2~713	6.4~492	7~543	1~800	175
SMBJP6KE250AL~SMBJP6KE400AL	SMB	Uni	600	214~342	1.1~1.9	344~548	237~380	263~420	1	150
SMBJP6KE6.8A~SMBJP6KE550A	SMB	Uni	600	5.8~468	0.8~58.1	10.5~760	6.45~522.5	7.14~577.5	1~1000	150
SMBJP6KE6.8CA~SMBJP6KE550CA	SMB	Bi	600	5.8~468	0.8~58.1	10.5~760	6.45~522.5	7.14~577.5	1~1000	150
SMB10J5.0A~SMB10J120A	SMB	Uni	1000	5.0~120	5.18~108.7	9.2~193	6.4~133	7~147	1~800	150
SMB10J5.0CA~SMB10J120CA	SMB	Bi	1000	5.0~120	5.18~108.7	9.2~193	6.4~133	7~147	1~800	150
SMBJ1.0KE6.8A~SMBJ1.0KE91A	SMB	Uni	1000	5.8~77.8	8~95.2	10.5~125	6.46~86.45	7.14~95.55	1~900	150
SMBJ1.0KE6.8CA~SMBJ1.0KE91CA	SMB	Bi	1000	5.8~77.8	8~95.2	10.5~125	6.46~86.45	7.14~95.55	1~900	150
1.5KE6.8A~1.5KE550A	DO-201AE	Uni	1500	5.8~467	2~144.8	10.5~760	6.45~522.5	7.14~577.5	5~1000	175
1.5KE6.8CA~1.5KE550CA	DO-201AE	Bi	1500	5.8~467	2~144.8	10.5~760	6.45~522.5	7.14~577.5	5~1000	175
SMB15J15A~SMB15J58A	SMB	Uni	1500	15~58	16.03~61.48	24.4~93.6	16.7~64.4	18.5~71.2	5	150
SMB15J15CA~SMB15J58CA	SMB	Bi	1500	15~58	16.03~61.48	24.4~93.6	16.7~64.4	18.5~71.2	5	150
SMCJ1.5KE6.8A~SMCJ1.5KE550A	SMC	Uni	1500	5.8~495	2~144.8	10.5~760	6.45~522.5	7.14~577.5	5~1000	175
SMCJ1.5KE6.8CA~SMCJ1.5KE550CA	SMC	Bi	1500	5.8~495	2~144.8	10.5~760	6.45~522.5	7.14~577.5	5~1000	175
SMCJ220AL~SMCJ350AL	SMC	Uni	1500	220~350	2.6~4.2	356~567	246~391	272~432	1	175

Protection Devices

TVS

Part Number	Package	Uni/Bi	Peak Pulse Power Dissipation	Reverse Standoff Voltage	Peak Pulse Current	Max. Clamping Voltage	Breakdown Voltage		Reverse Leakage	Operating Junction Temperature
			P _{PK} (W)	V _{RRM} (V)	I _{PP} (A)	V _C (V)	V _{BR} (V) Min	V _{BR} (V) Max	I _R (uA)	T _J (°C)
SMCJ220CAL~SMCJ250CAL	SMC	Bi	1500	220~250	3.7~4.2	356~405	246~279	272~309	1	175
SMCJ5.0A~SMCJ440A	SMC	Uni	1500	5.0~440	2.1~163	9.2~713	6.4~492	7~543	1~800	175
SMCJ5.0CA~SMCJ440CA	SMC	Bi	1500	5.0~440	2.1~163	9.2~713	6.4~492	7~543	1~800	175
SMB20J20A~SMB20J58A	SMB	Uni	2000	20~58	21.37~61.73	32.4~93.6	22.2~64.4	24.5~71.2	1	150
SMB20J20CA~SMB20J58CA	SMB	Bi	2000	20~58	21.37~61.73	32.4~93.6	22.2~64.4	24.5~71.2	1	150
SMB20J558CA	SMB	Bi	2000	58	21.37	93.6	64.4	71.2	5	150
SMLJ5.0A~SMLJ440A	SMC	Uni	3000	5~440	4.21~326	9.2~713	6.4~492	7~543	2~1000	175
SMLJ5.0CA~SMLJ440CA	SMC	Bi	3000	5~440	4.21~326	9.2~713	6.4~492	7~543	2~1000	175
3.0SMBJ558CA	SMB	Bi	3000	58	32.1	93.6	64.4	71.2	5	150
5.0SMLJ11A~5.0SMLJ400A	SMC	Uni	5000	11~400	7.7~275	18.2~648	12.2~447	13.5~494	5~800	175
5.0SMLJ11CA~5.0SMLJ400CA	SMC	Bi	5000	11~400	7.7~275	18.2~648	12.2~447	13.5~494	5~800	175
5.0SMLJ5.0AL~5.0SMLJ85AL	SMC	Uni	5000	5~85	36.5~543.6	9.2~137	6.4~94.4	7~104	2~1000	175
5.0SMLJ5.0CAL~5.0SMLJ85CAL	SMC	Bi	5000	5~85	36.5~543.6	9.2~137	6.4~94.4	7~104	2~1000	175
5KP22AL~5KP188AL	R-6	Uni	5000	22~188	15.2~141	35.5~328	24.4~209	26.9~231	2	150
5KP22CAL~5KP188CAL	R-6	Bi	5000	22~188	15.2~141	35.5~328	24.4~209	26.9~231	2	150
5KP5.0A~5KP440A	R-6	Uni	5000	5~440	7~543	9.2~713	6.4~492	7~543	10~5000	175
5KP5.0CA~5KP440CA	R-6	Bi	5000	5~440	7~543	9.2~713	6.4~492	7~543	10~5000	175
15KP17A~15KP280A	R-6	Uni	15000	17~280	33~512	29.3~452	18.9~311	20.79~342.4	10~5000	175
15KP17CA~15KP280CA	R-6	Bi	15000	17~280	33~512	29.3~452	18.9~311	20.79~342.4	10~5000	175
15KP17AL~15KP280AL	R-6	Uni	15000	17~280	33~512	29.3~452	18.9~311	20.79~342.4	10~5000	175
15KP17CAL~15KP280CAL	R-6	Bi	15000	17~280	33~512	29.3~452	18.9~311	20.79~342.4	10~5000	175
30KP28A~30KP288A	R-6	Uni	30000	28~288	64.5~606	50~469.9	31.28~321.7	34.24~352.2	10~5000	175
30KP28CA~30KP288CA	R-6	Bi	30000	28~288	64.5~606	50~469.9	31.28~321.7	34.24~352.2	10~5000	175
SMEJ58CA~SMEJ86CA	SME	Bi	-	58~86	10000	110~157	64~96	70~107	5	125
SMGJ80CA	SMG	Bi	-	80	2500	130	90	110	5	125
AK1-076C	AK1	Bi	-	76	1000	135	83	-	20	150
AK3-030C~AK3-430C	AK3	Bi	-	30~430	3000	90~625	32~440	-	20	150
AK6-058C~AK6-430C	AK6	Bi	-	58~430	6000	110~625	64~440	-	20	150
AK10-058C~AK10-430C	A10	Bi	-	58~430	10000	110~625	64~440	-	20	150
AK15-058C~AK15-076C	A15	Bi	-	58~76	15000	110~145	64~85	-	20	150
AK3-380C-Y~AK3-560C-Y	AK3-Y	Bi	-	380~560	3000	520~760	401~585	443~650	10	150
AK6-380C-Y~AK6-560C-Y	AK6-Y	Bi	-	380~560	6000	540~760	401~585	443~650	10	150
AK10-380C-Y~AK10-560C-Y	AK10-Y	Bi	-	380~560	10000	540~760	401~585	443~650	10	150