

Featured Packages



DFNWB 2.5x



SO-8



SO-16



5x6



SOD-323



SOT-23



TO-277A



D2PAK



SOT-227

Also Available: Regular Rectifier, Fast Recovery Rectifier, Power Modules (Schottky & Ultrafast Rectifiers), Zener, Switching, Chips



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www.smc-diodes.com



COMMERCIAL AVIATION



About our company...

SMC Diode Solutions was created in 1997 to serve the High Reliability needs of our customers. During that time we have added the highest quality standards and screening processes to better service the aerospace industry. These standards in conjunction with our extensive product range has made SMC a preferred supplier for many of the industry leading aerospace customers. SMC's portfolio includes TVS diodes and arrays, rectifiers, power modules and custom devices in a variety of packaging manufactured to the highest quality standards. We design and manufacture our own products in our own facilities.

SMC Diode Solutions also features a US based design team backed by a full simulation team using state of the art design software. Our fab teams include packaging engineers who team with the industry's major packaging houses.

Our high reliability background and superior design skills in combination with our advanced packaging technologies makes SMC Diode Solutions a premier choice for all of your aerospace needs.

SMC Capabilities

SMC Capabilities	Description	TVS	EOS Protection Devices	Schottkies	Rectifier	Hi Power Modules	Chips
Facility Certifications	ISO 9001:2008 ISO14001:2004 TS16949 (AEC-Q101)	✓	✓	✓	✓	✓	✓
Obsolescence Policy	Available and handled by PCN process	✓	✓	✓	✓	✓	✓
Reliability Data	Reliability and FIT data are available via SMC website	✓	✓	✓	✓	✓	✓
RoHS & REACHbCertificates	Available	✓	✓	✓	✓	✓	✓
Traceability	Per MIL standard	✓	✓	✓	✓	✓	✓
Screening & Reliability Testing	Available upon request	✓	✓	✓	✓	✓	✓
Format	Can be offered according to MIL requirements	✓	✓	✓	✓	✓	✓
Packages	State of the art and latest package designs available	✓	✓	✓	✓	✓	
Chip Metalization	Can be offered according to customer requirements						✓

Screening Options

SCREEN OR TEST DESCRIPTION				
Prefix	Commercial Flow	U	UA	UX
100% Wafer Probe	R	R	R	R
3-Sigma lot norm determination		R	R	R
Surge Test	1X	1X	1X	1X
100% DC Electrical Test Go-No-Go	Available	R	R	R
Temperature Cycling		10 Cycles	10 Cycles	20 Cycles
Post TC Surge Test	Available upon request	1X	3X	10X
100% Thermal Impedance		R	R	R
100% DC Electrical Test	State of the art and latest package designs available		go-no-go	R
HTRB			24 Hours	96 Hours
100% DC Electrical Test	go-no-go	go-no-go	go-no-go	R
Delta Calculation				R
PDA Calculation				R
100% Visual Inspection	R	R	R	R
Certification of Conformance	R	R	R	R
Group A/B/C Inspection				O

Remark: Screening flow shows screening for TVS parts. The flow will be adjusted for other diode families.

TVS-Transient Voltage Supressors

SCREEN OR TEST DESCRIPTION		
TPK30KPxx - series	30kW	SPD-4 package
TPK15KPxx - series	15 kW	SPD-4 package
5.0SMLJxx - series	5 kW	SMC (DO-214AB) package Uni & bidirectional
3.0SMCJxx - series	3 kW	SMC (DO-214AB) package Uni & bidirectional
SMCjxx - series	1.5 kW	SMC (DO-214AB) package Uni & bidirectional
SMBJxx - series	0.6 kW	SMB (DO-214AA) package Uni & bidirectional
SMAJxx - series	0.4 kW	SMA (DO-214AC) package Uni & bidirectional



SPD-3/4



SMA/B/C



P-600

EOS Protection Devices & TVS Arrays

- 1 to 8-line protectors
- ultra low capacitance - eGuard - series with CMAX ≤ 0,35pF
- more eGuard devices coming soon

UltraLow Vf Schottky Rectifier

- Trench Technology
- 1A - 60A / 40V - 300V
- DPAK- D²PAK, TO-220AB/C, ITO-229AB/C, TO-277A, R-6 and more

Ultrafast Recovery Rectifier

- 1A - 60A / 200V - 1200V
- various packages: R-1, DO-41,SMA, SMB, SMC, DPAK, TO-220AB/C,DO- 201AD, D2PAK, TO-247AD and more

Wafers and Die

Silicon chips for all the devices we make are also available at Digi-Key

Standard metalization:

Bottom:

-> solderable (Ag)

Top:

-> solderable (Ag) or wire bondable (Al)

Format: uncut wafer, cut wafer on tap, in waffle pack, in bottle

- 100% tested for room temperature electrical parameters
- Suitable for modules and hybrids
- Silicon chip with Mo disc brazed on top or discs
- Brazed on both sides are also available



www.digikey.com