



Micro Commercial Components



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S3AB THRU S3MB

3.0 Amp Glass Passivated Rectifier 50 to 1000 Volts

Features

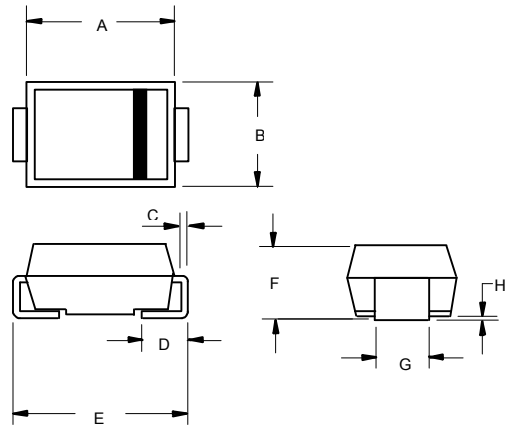
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low forward voltage drop and high current capability
- Glass passivated die construction
- Surge overload rating to 100A peak
- Ideally suited for automatic assembly
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Maximum Ratings

- Terminals: Solder Plated Terminal – Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Operating Junction Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S3AB	S3AB	50V	35V	50V
S3BB	S3BB	100V	70V	100V
S3DB	S3DB	200V	140V	200V
S3GB	S3GB	400V	280V	400V
S3JB	S3JB	600V	420V	600V
S3KB	S3KB	800V	560V	800V
S3MB	S3MB	1000V	700V	1000V

DO-214AA (SMB) (LEAD FRAME)

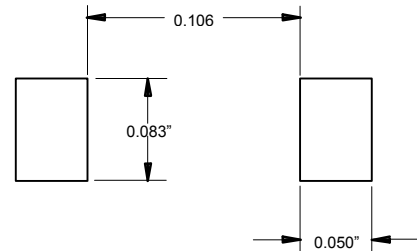


DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.160	.185	4.06	4.70	
B	.130	.155	3.30	3.94	
C	.006	.012	0.15	0.31	
D	.030	.060	0.76	1.52	
E	.200	.220	5.08	5.59	
F	.079	.103	2.01	2.62	
G	.075	.087	1.91	2.21	
H	.002	.008	0.05	0.203	

Electrical Characteristics @ 25°C Unless Otherwise Specified

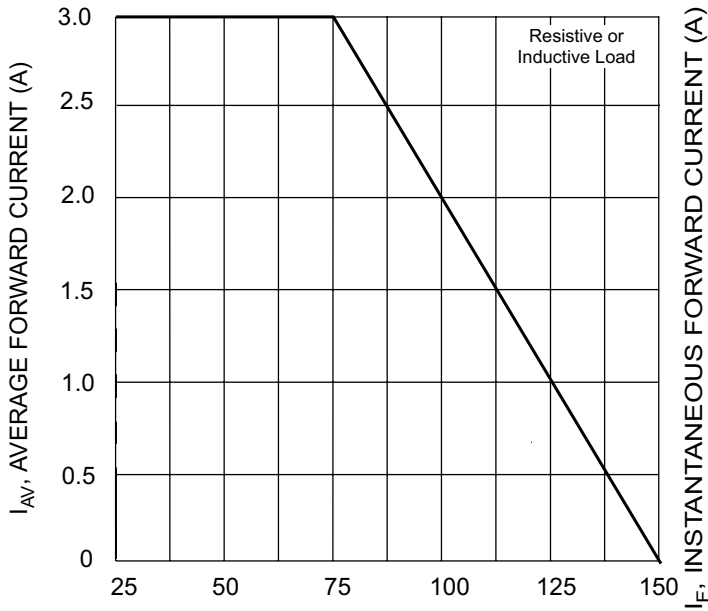
Average Forward Current	I_o	3.0A	$T_T = 75^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	100A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.15V	$I_{FM} = 3.0A$; $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10uA 250uA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	40pF	Measured at 1.0MHz, $V_R=4.0V$
Typical Thermal Resistance	R_{thJL}	10°C/W	

SUGGESTED SOLDER PAD LAYOUT

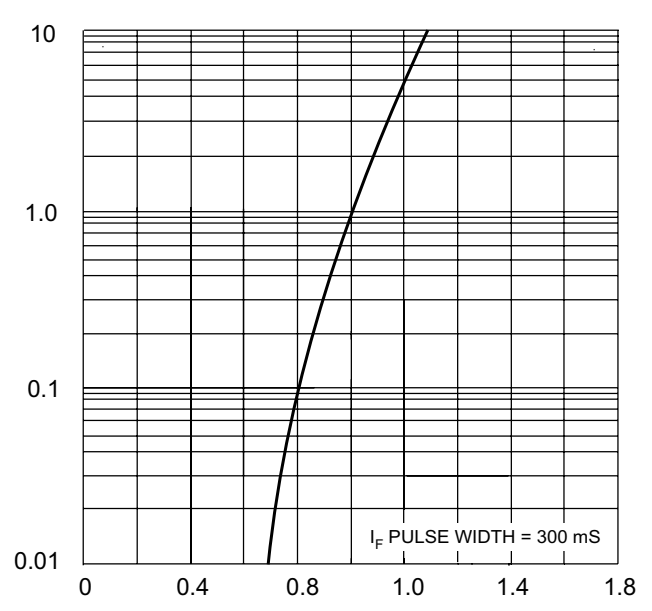


Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

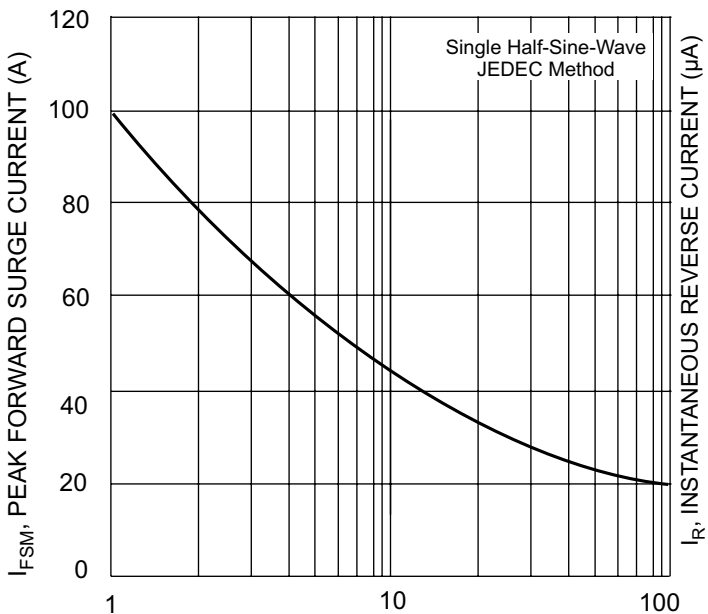
S3AB thru S3MB



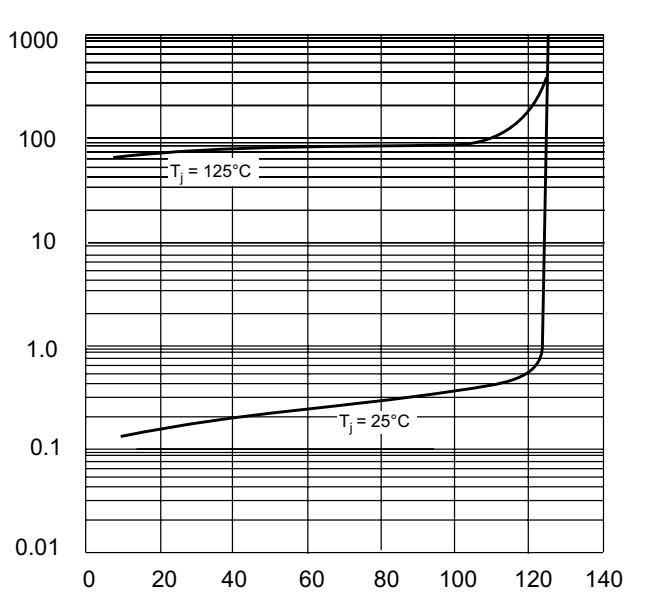
T_T , TERMINAL TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Forward Surge Current Derating Curve



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 4 Typical Reverse Characteristics



TM

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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