

**Micro Commercial Components** 



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# S3AB **THRU** S<sub>3</sub>MB

## 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
- Weight: 0.093 grams (approx)

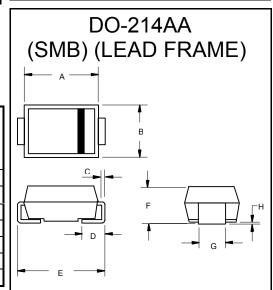
MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage	_	Voltage
S3AB	S3AB	50V	35V	50V
S3BB	S3BB	100V	70V	100V
S3DB	S3DB	200V	140V	200V
S3GB	S3GB	400V	280V	400V
S3JB	S3JB	600V	420V	600V
S3KB	S3KB	800V	560V	800V
S3MB	S3MB	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

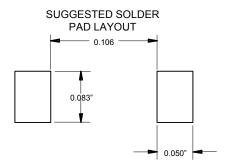
	1100 0 20 0		ioi mee epeemea
Average Forward	lo	3.0A	$T_T = 75^{\circ}C$
Current			
Peak Forward Surge	I <sub>FSM</sub>	100A	8.3ms, half sine
Current			
Maximum			
Instantaneous	$V_{F}$	1.15V	$I_{FM} = 3.0A;$
Forward Voltage			$T_J = 25^{\circ}C$
Maximum DC			
Reverse Current At	$I_R$	10uA	$T_J = 25^{\circ}C$
Rated DC Blocking		250uA	$T_{J} = 125^{\circ}C$
Voltage			
Typical Junction	CJ	40pF	Measured at
Capacitance			1.0MHz, $V_R$ =4.0V
Typical Thermal	RthJL	10°C/W	
Resistance			

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

# 3.0 Amp Glass **Passivated Rectifier** 50 to 1000 Volts



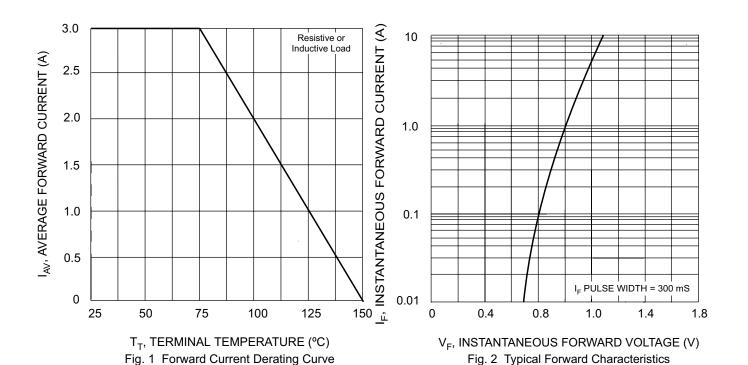
DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.160	.185	4.06	4.70		
В	.130	.155	3.30	3.94		
С	.006	.012	0.15	0.31		
D	.030	.060	0.76	1.52		
E	.200	.220	5.08	5.59		
F	.079	.103	2.01	2.62		
G	.075	.087	1.91	2.21		
Н	.002	.008	0.05	0.203		



## S3AB thru S3MB



**Micro Commercial Components** 



120 1000 Single Half-Sine-Wave IR, INSTANTANEOUS REVERSE CURRENT (μA)  $_{\text{FSM}}$ , PEAK FORWARD SURGE CURRENT (A) JEDEC Method 100 100 T<sub>i</sub> = 125°C 80 10 60 1.0 40 T<sub>i</sub> = 25°C 0.1 20 0.01 0 20 40 100 60 80 120 140 10 100 PERCENT OF RATED PEAK REVERSE VOLTAGE (%) NUMBER OF CYCLES AT 60 Hz Fig. 4 Typical Reverse Characteristics

Fig. 3 Forward Surge Current Derating Curve



## 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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