

Surface Mount Schottky Rectifier

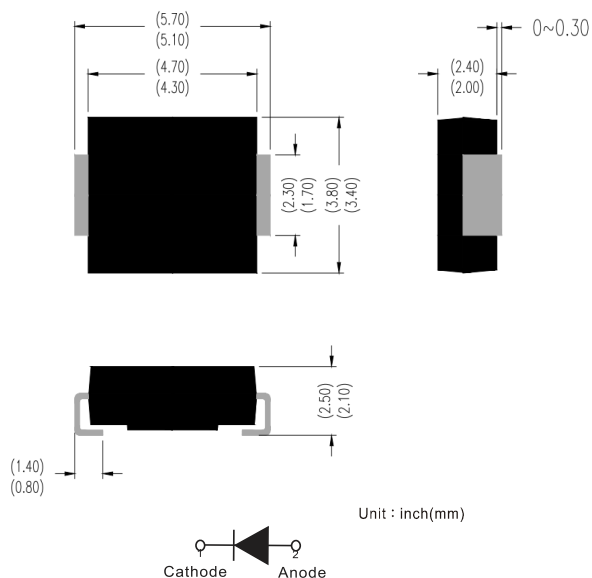
Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Compliant with RoHS standards, halogen-free

Mechanical Data

- **Package:** SMB/DO-214AA
- **Terminals:** Tin plated leads, solderable per
- **Polarity:** Cathode line denotes the cathode end

SMB/DO-214AA



Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Unit	SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS310B	SS315B	SS320B
Repetitive peak reverse voltage	V_{RRM}	V	20	30	40	50	60	80	100	150	200
Average rectified output current @60Hz sine wave, resistance load, T_c (FIG.1)	I_O	A	3.0								
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	I_{FSM}	A	70								
Storage temperature	T_{slg}	$^\circ\text{C}$	-55 ~ +150								
Junction temperature	T_j	$^\circ\text{C}$	-55 ~ +150					-55 ~ +175			

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Unit	Test Conditions	SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS310B	SS315B	SS320B
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =3.0A	0.55			0.70		0.85		0.95	
Maximum DC reverse current at rated DC blocking voltage per diode @ V _{RM} =V _{RRM}	I _{RRM}	mA	Ta=25°C	0.50					0.10			
			Ta=100°C	10					5			

Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Unit	SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS310B	SS315B	SS320B
Thermal resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	55 ¹⁾								
	$R_{\theta J-C}$		20 ¹⁾								

Note:

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16mm) copper pad areas



Characteristics (Typical)

FIG1: I_o -T_c Curve

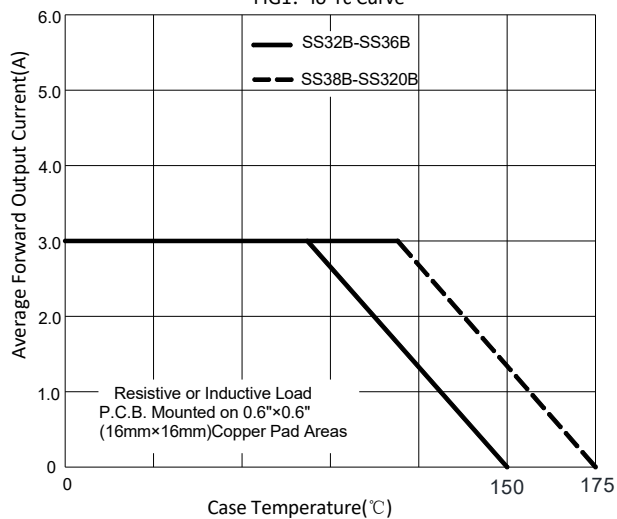


FIG2: Surge Forward Current Capability

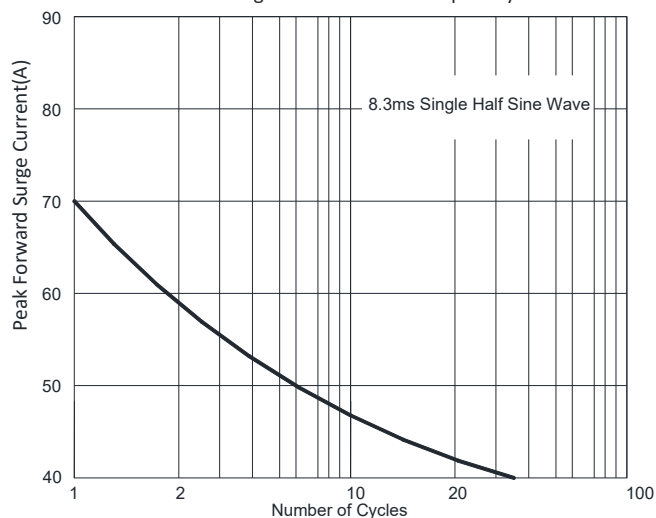


FIG3: Forward Voltage

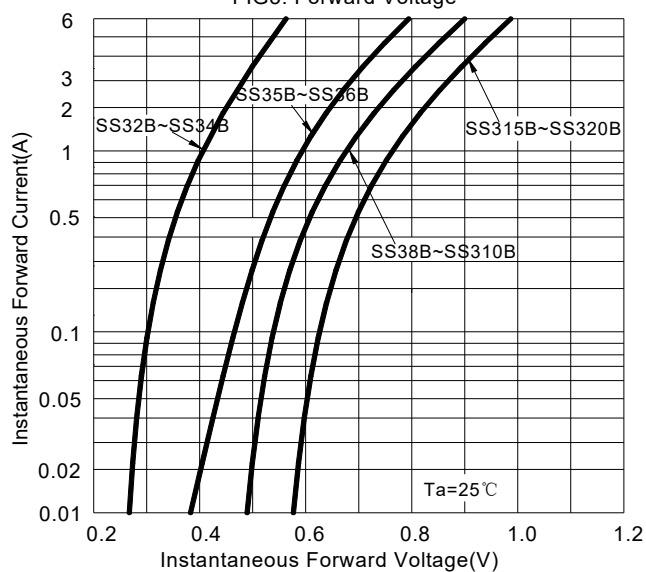


FIG4: Typical Reverse Characteristics

