

Surface Mount Schottky Barrier Diode

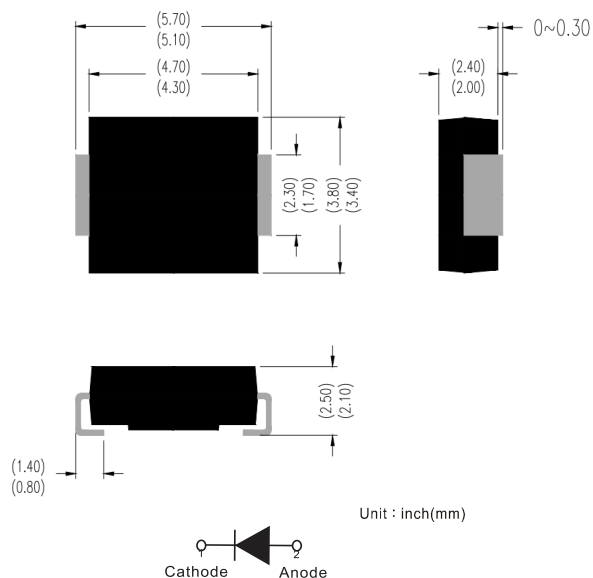
Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- AEC-Q101 qualified
- Compliant with RoHS standards, halogen-free

Mechanical Data

- **Package:** SMB/DO-214AA
- **Terminals:** Tin plated leads, solderable per J-STD-002
- **Polarity:** Cathode line denotes the cathode end

SMB/DO-214AA



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

Parameter	Symbol	Unit	SS32 BQ	SS33 BQ	SS34 BQ	SS35 BQ	SS36 BQ	SS38 BQ	SS310 BQ	SS315 BQ	SS320 BQ
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_{stg}	$^\circ\text{C}$	-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	SS32 BQ	SS33 BQ	SS34 BQ	SS35 BQ	SS36 BQ	SS38 BQ	SS310 BQ	SS315 BQ	SS320 BQ
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	SS32 BQ	SS33 BQ	SS34 BQ	SS35 BQ	SS36 BQ	SS38 BQ	SS310 BQ	SS315 BQ	SS320 BQ
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)

