

Surface Mount Schottky Barrier Rectifiers

(Pb) Lead(Pb)-Free

Feature:

- *For Surface Mount Application
- *Metal-Semiconductor Junction With Guardring
- *Epitaxial Construction
- *Very Low Forward Voltage Drop
- *High Current Capability
- *Plastic Material Has UL Flammability Classification 94V-0
- *For Use In Low , And Polarity Protection Applications

**REVERSE VOLTAGE
20 TO 200 VOLTS
FORWARD CURRENT
3.0 AMPERE**



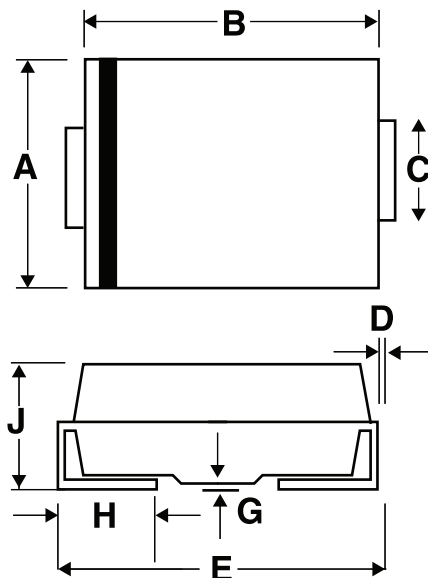
SMC(DO-214AB)

Mechanical Data

- * Case : Molded Plastic
- * Polarity : Indicated by cathode band
- * Weight : 0.231 grams

SMC Outline Dimension

Unit:mm



SMC		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62

Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.

Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	B320	B330	B340	B350	B360	B380	B3100	B3150	B3200	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current	I_F	3.0									A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80.0									A	
Maximum instantaneous $I_F=3A$ @ 25°C	V_F	0.50			0.70		0.85		0.87	0.90	V	
Maximum DC reverse current @ TA=25°C	I_R	0.5					0.2					mA
at rated DC blocking voltage @ TA=100°C		10.0					5.0					
Typical junction capacitance	C_J	180			150		110		100	80	pF	
Typical thermal resistance	$R_{\theta JA}$	70									°C/W	
	$R_{\theta JC}$	30										
Operating temperature range	T_J	-55 to +125									°C	
Storage temperature range	T_{STG}	-55 to +150									°C	

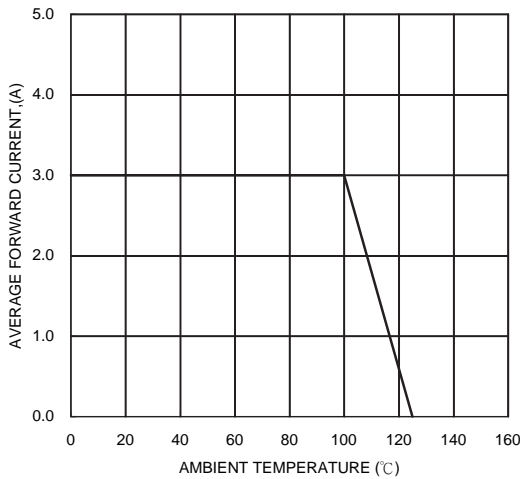


FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

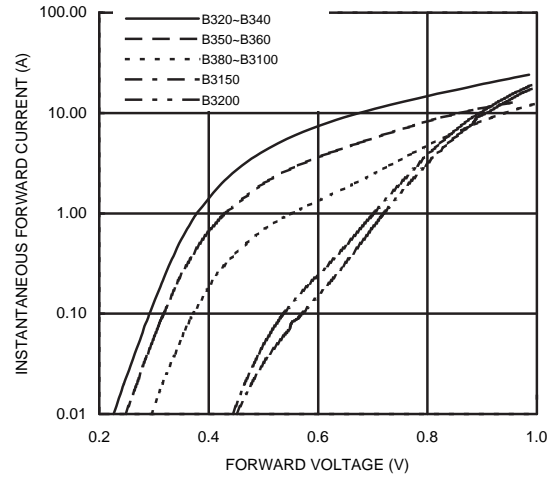


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

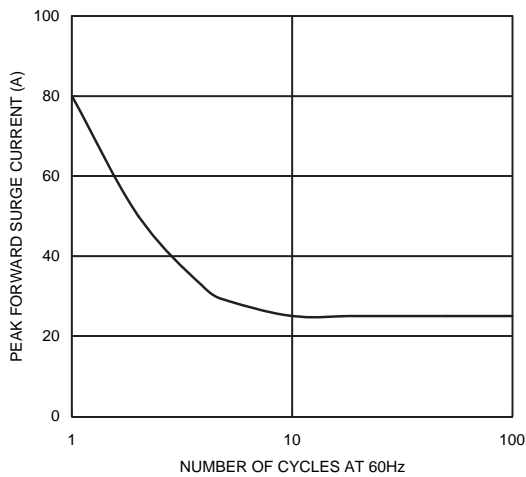


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

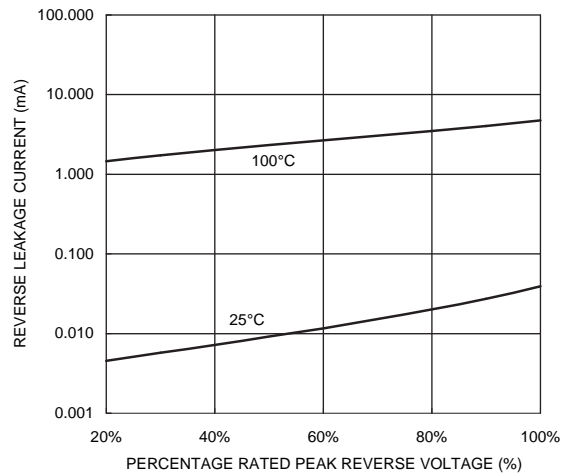


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

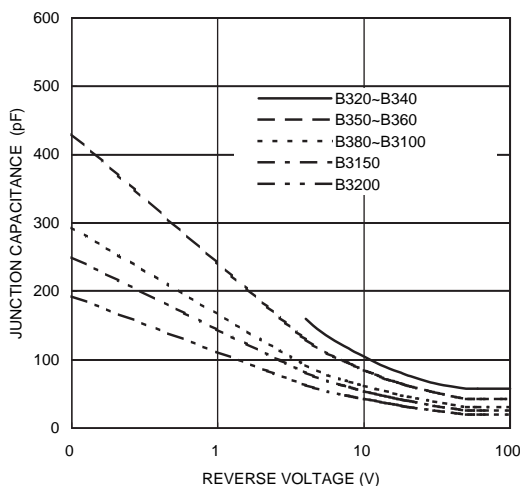


FIG. 5-TYPICAL JUNCTION CAPACITANCE