WEITRON

B320 thru B3200

Surface Mount Schottky Barrier Rectifiers

Lead(Pb)-Free

REVERSE VOLTAGE
20 TO 200 VOLTS
FORWARD CURRENT
3.0 AMPERE

Feature:

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



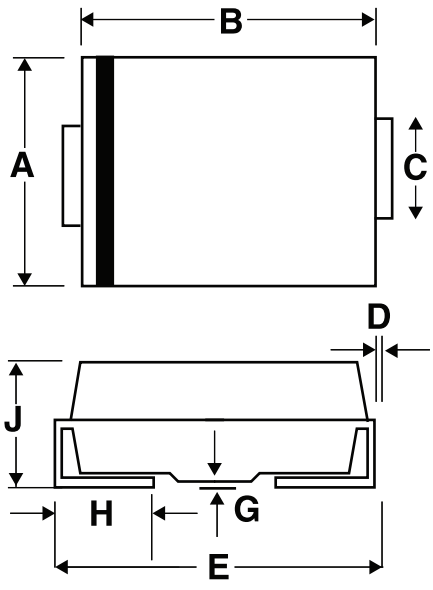
SMC(DO-214AB)

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℃ 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℃	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℃		10.0					5.0				
Typical junction capacitance	C_J	180			150		110		100	80	pF
Typical thermal resistance	$R_{\theta JA}$	70									℃/W
	$R_{\theta JC}$	30									
Operating temperature range	T_J	-55 to +125									°C
Storage temperature range	T_{STG}	-55 to +150									°C

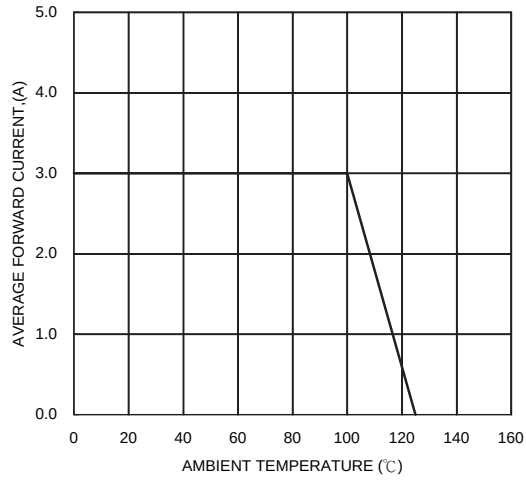


FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

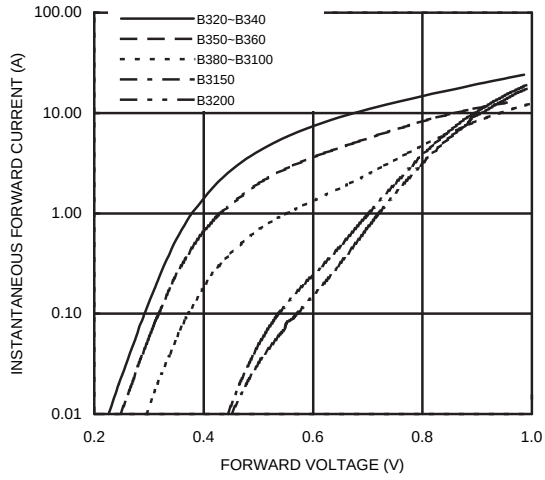


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

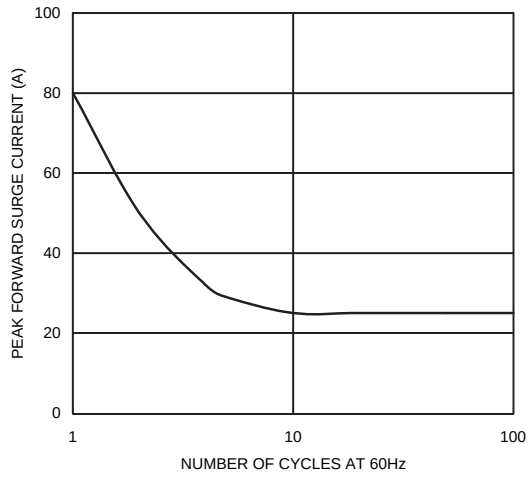


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

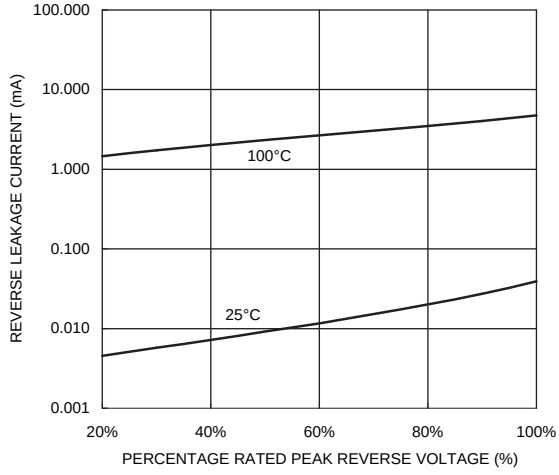


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

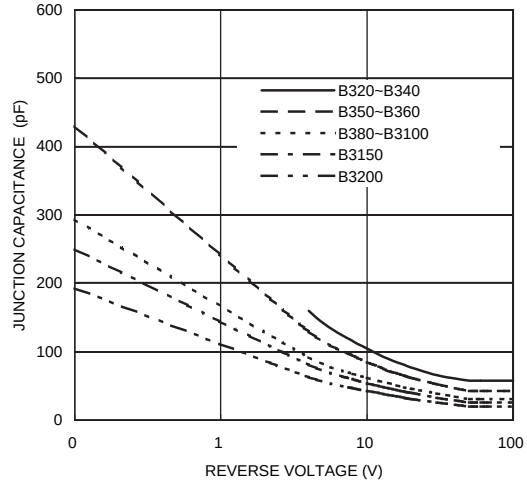


FIG. 5-TYPICAL JUNCTION CAPACITANCE