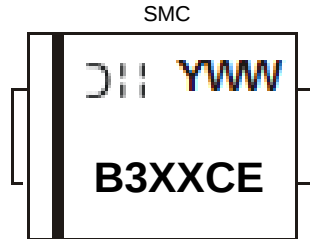


Marking Information (Cont.)


B3XXCE = Product Type Marking Code, ex: B320CE

DII = Manufacturers' Code Marking

YWW = Date Code Marking

Y = Last Digit of Year (ex: 7 for 2017)

WW = Week Code (01 to 53)

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristic	Symbol	B320BE B320CE	B330BE B330CE	B340BE B340CE	B345BE B345CE	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _{RM}	20	30	40	45	V
Average Rectified Output Current	I _O	3				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	80				A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Ambient (Note 5) SMB SMC	R _{θJA}	90 70	°C/W
Typical Thermal Resistance Junction to Case (Note 5) SMB SMC	R _{θJC}	50 30	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V _F	—	0.46 0.41	0.50 —	V	I _F = 3A, T _A = +25°C I _F = 3A, T _A = +125°C
Leakage Current (Note 6)	I _R	—	—	0.10 0.15 0.20 0.30 30	mA	V _R = 20V, T _A = +25°C V _R = 30V, T _A = +25°C V _R = 40V, T _A = +25°C V _R = 45V, T _A = +25°C V _R = 45V, T _A = +125°C
Typical Capacitance	C _T	—	140	—	pF	V _R = 4.0V, f = 1MHz

 Notes: 5. Device mounted on FR-4 substrate, 0.4"×0.5", 2oz, single-sided, PC boards with 0.2"×0.25" copper pad.
 6. Short duration pulse test used to minimize self-heating effect.

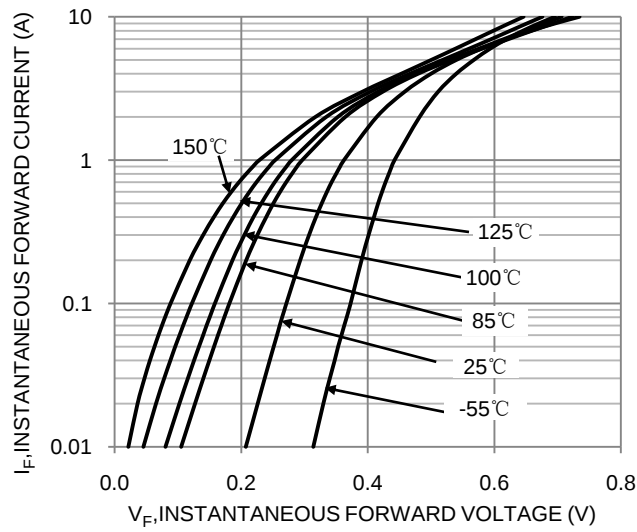


Figure 1. Typical Forward Characteristics

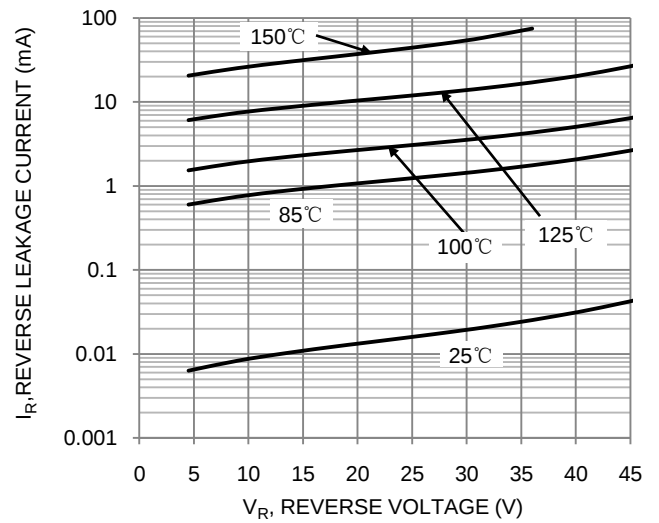


Figure 2. Typical Reverse Characteristics

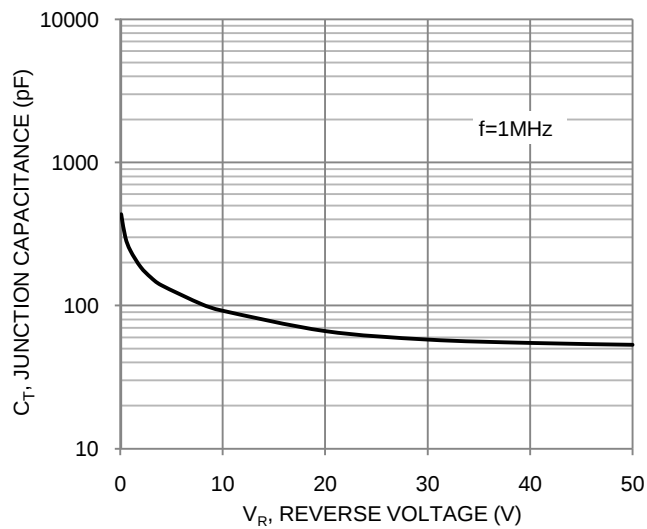


Figure 3. Typical Junction Capacitance

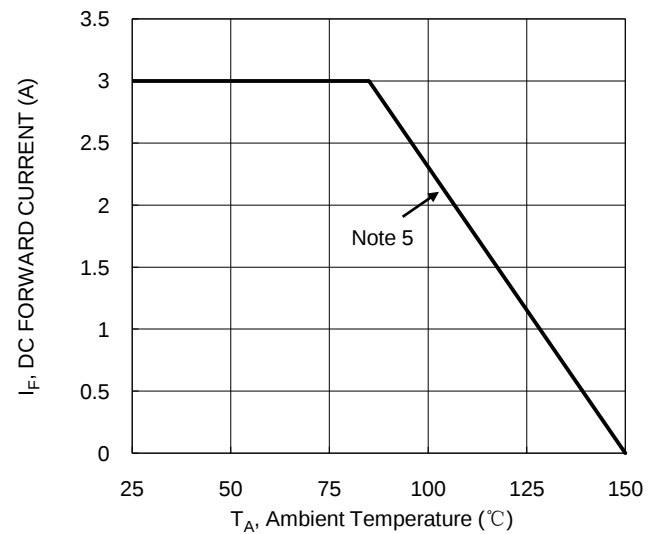
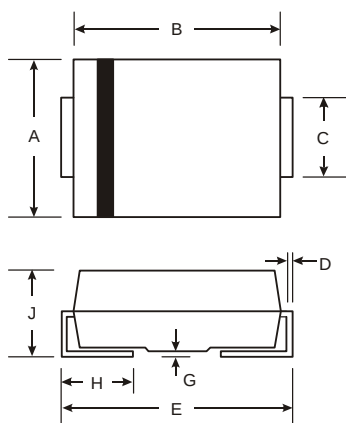


Figure 4. DC Forward Current Derating

Package Outline Dimensions

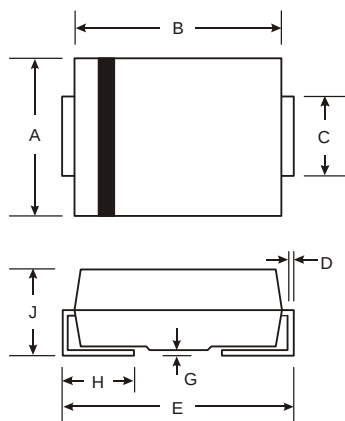
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SMB



SMB		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.57
C	1.96	2.21
D	0.15	0.31
E	5.00	5.59
G	0.05	0.20
H	0.76	1.52
J	2.00	2.50
All Dimensions in mm		

SMC

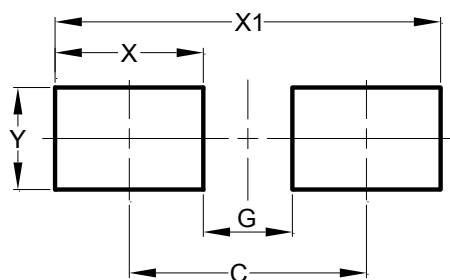


SMC		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.50
All Dimensions in mm		

Suggested Pad Layout

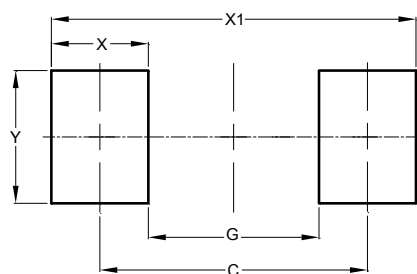
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SMB



Dimensions	Value (in mm)
C	4.30
G	1.80
X	2.50
X1	6.80
Y	2.30

SMC



Dimensions	Value (in mm)
C	6.90
G	4.40
X	2.50
X1	9.40
Y	3.30

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