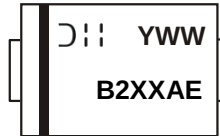


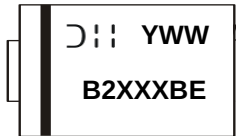
Marking Information

SMA



B2XXAE = Product Type Marking Code, ex: B270AE (SMA Package)
 ⏏ = Manufacturers' Code Marking
 YYWW = Date Code Marking
 Y = Last Digit of Year (ex: 0 for 2020)
 WW = Week Code (01 to 53)

SMB



B2XXBE or B2XXXBE = Product Type Marking Code, ex: B270BE (SMB Package)
 ⏏ = Manufacturers' Code Marking
 YYWW = Date Code Marking
 Y = Last Digit of Year (ex: 0 for 2020)
 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	B270AE B270BE	B280BE	B290BE	B2100BE	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	70	80	90	100	V
Working Peak Reverse Voltage	V _{RWM}					
DC Blocking Voltage	V _R					
Average Rectified Output Current	I _O	2.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms	I _{FSM}	50				A
Single Half Sine-Wave Superimposed on Rated Load						

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 5)	R _{θJA}	110	°C/W
	SMA	100	
Typical Thermal Resistance, Junction to Case (Note 5)	R _{θJC}	65	°C/W
	SMA	50	
Operating and Storage Temperature Range	T _J , T _{STG}	-65 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	—	0.74	0.79	V	I _F = 2.0A, T _A = +25°C
		—	0.60	—		I _F = 2.0A, T _A = +125°C
Leakage Current (Note 6)	I _R	—	—	7	μA	@ Rated V _R , T _A = +25°C
		—	0.4	—	mA	@ Rated V _R , T _A = +125°C
Typical Capacitance	C _T	—	70	—	pF	V _R = 4V, f = 1MHz

Notes: 5. Valid provided that terminals are kept at ambient temperature.
 6. Short duration pulse test used to minimize self-heating effect.

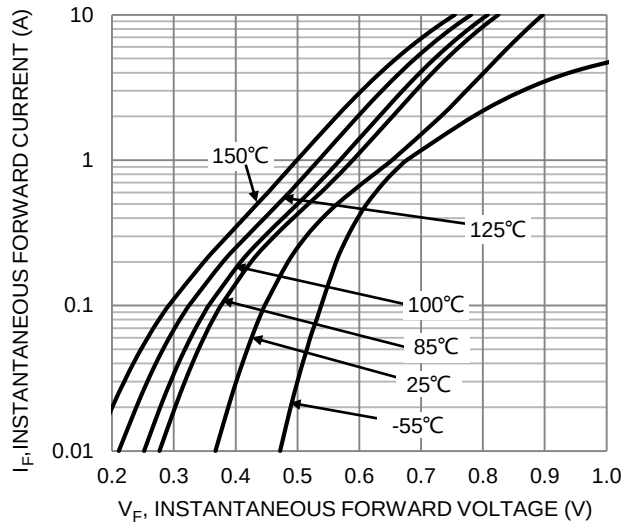


Figure 1. Typical Forward Characteristics

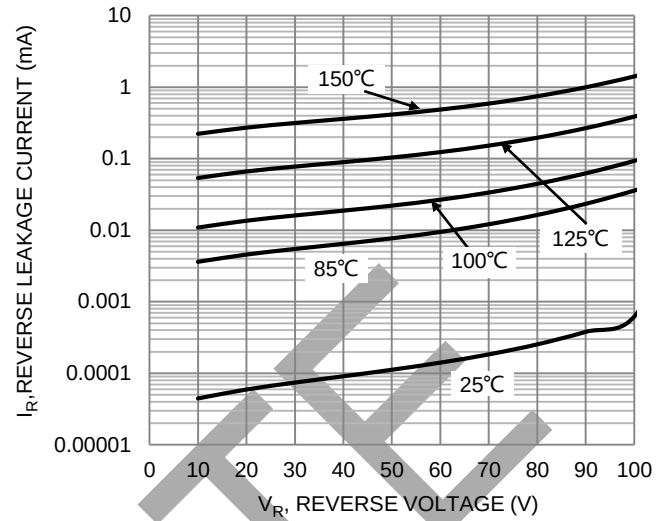


Figure 2. Typical Reverse Characteristics

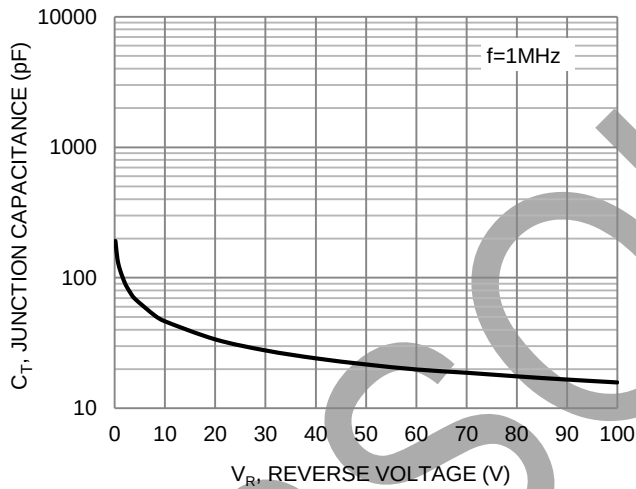


Figure 3. Typical Junction Capacitance

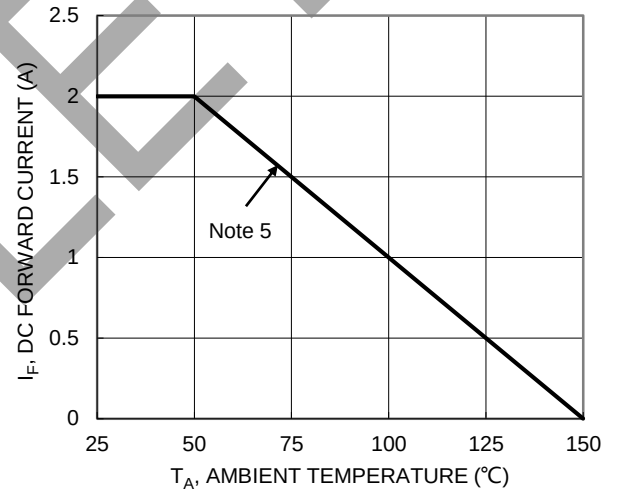
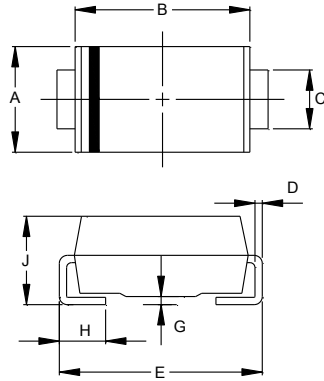


Figure 4. DC Forward Current Derating

Package Outline Dimensions

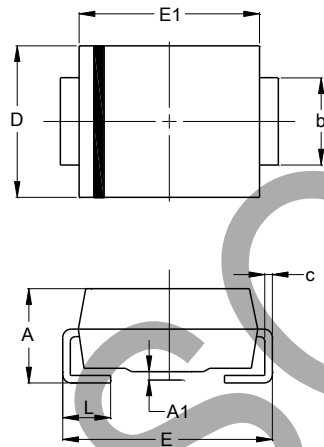
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SMA



SMA		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.05	0.20
H	0.76	1.52
J	1.96	2.40
All Dimensions in mm		

SMB

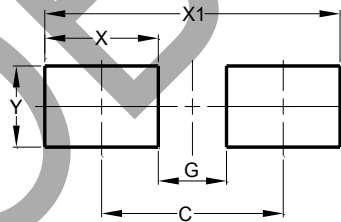


SMB		
Dim	Min	Max
A	2.00	2.50
A1	0.05	0.20
b	1.96	2.21
c	0.15	0.31
D	3.30	3.94
E	5.00	5.59
E1	4.06	4.57
L	0.76	1.52
All Dimensions in mm		

Suggested Pad Layout

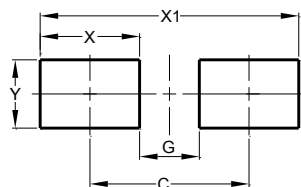
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SMA



Dimensions	Value (in mm)
C	4.00
G	1.50
X	2.50
X1	6.50
Y	1.70

SMB



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

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