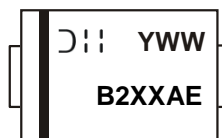


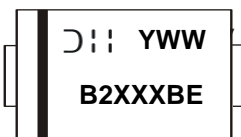
## Marking Information

### SMA



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

## Maximum Ratings (@T<sub>A</sub> = +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 <sub>RRM</sub>	70	80	90	100	V
Working Peak Reverse Voltage	V <sub>RWM</sub>					
DC Blocking Voltage	V <sub>R</sub>					
Average Rectified Output Current	I <sub>O</sub>	2.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	50				A

## Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 5)	SMA	110	°C/W
	SMB	100	
Typical Thermal Resistance, Junction to Case (Note 5)	SMA	65	°C/W
	SMB	50	
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

## Electrical Characteristics (@T<sub>A</sub> = +25°C unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V <sub>F</sub>	—	0.74	0.79	V	I <sub>F</sub> = 2.0A, T <sub>A</sub> = +25°C
			0.60	—		I <sub>F</sub> = 2.0A, T <sub>A</sub> = +125°C
Leakage Current (Note 6)	I <sub>R</sub>	—	0.4	7	μA	@ Rated V <sub>R</sub> , T <sub>A</sub> = +25°C
				—	mA	@ Rated V <sub>R</sub> , T <sub>A</sub> = +125°C
Typical Capacitance	C <sub>T</sub>	—	70	—	pF	V <sub>R</sub> = 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.

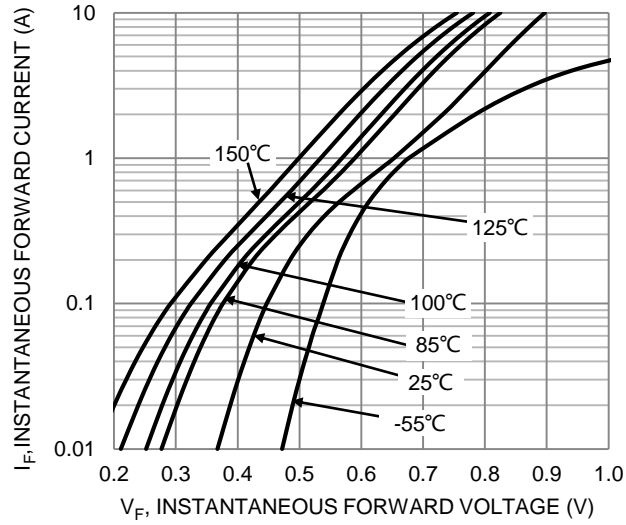


Figure 1. Typical Forward Characteristics

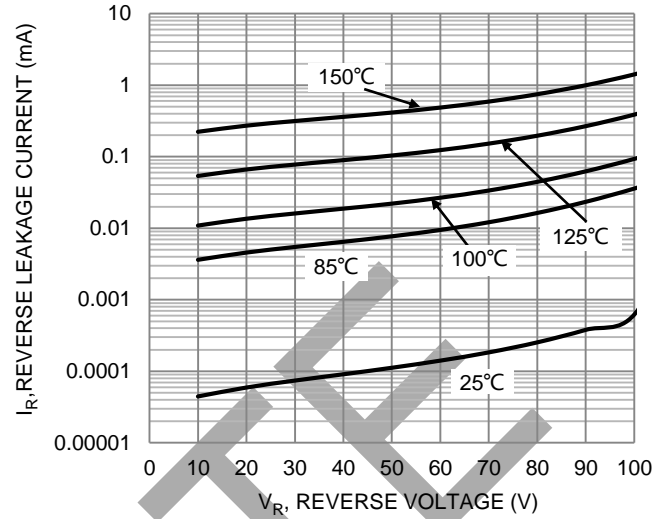


Figure 2. Typical Reverse Characteristics

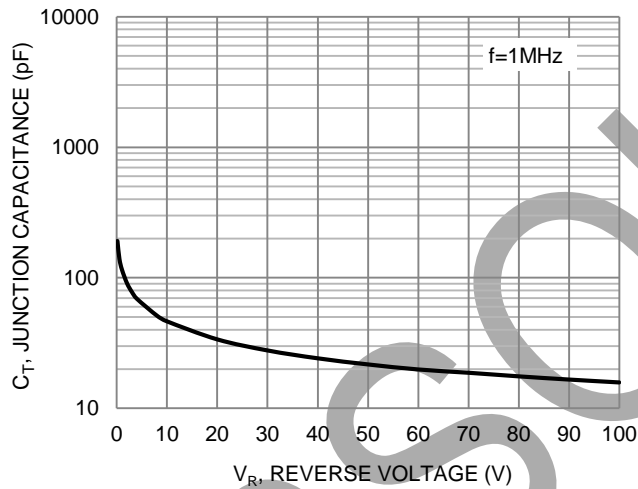


Figure 3. Typical Junction Capacitance

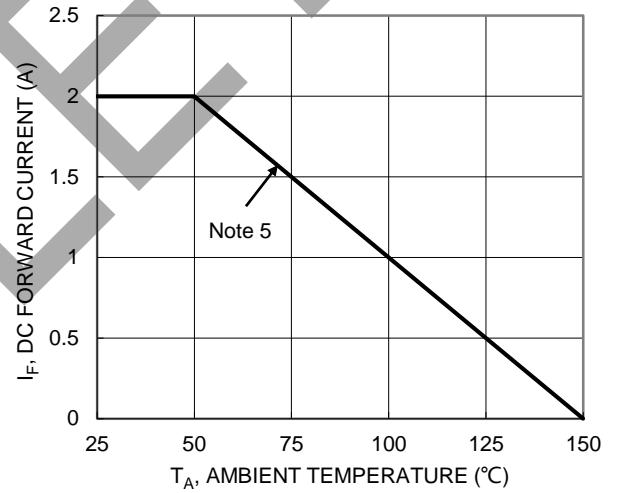
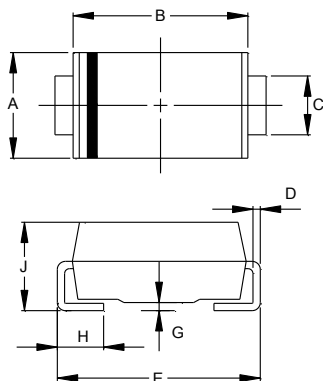


Figure 4. DC Forward Current Derating

## Package Outline Dimensions

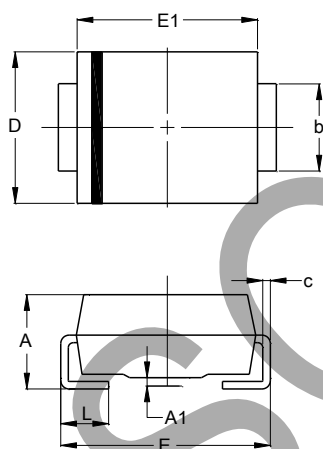
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

### 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

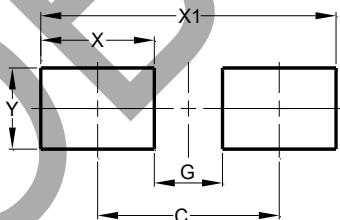


SMB		
Dim	Min	Max
A	2.00	2.50
A1	0.05	0.20
b	1.96	2.21
c	0.15	0.31
D	3.30	3.94
E	5.00	5.59
E1	4.06	4.57
L	0.76	1.52
All Dimensions in mm		

## Suggested Pad Layout

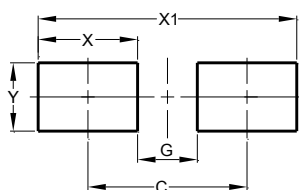
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

### 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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