

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	B340AF	B345AF	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	45	V
Working Peak Reverse Voltage	V_{RWM}			
DC Blocking Voltage	V_{RM}			
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)	R _{θJA}	35	°C/W
Typical Thermal Resistance Junction to Case (Note 5)	R _{θJC}	6.0	°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	—	0.47 0.43	0.50 —	V	I _F = 3A, T _J = +25°C I _F = 3A, T _J = +125°C
Leakage Current (Note 6)	I _R	—	0.03	0.20	mA	V _R = 40V, T _J = +25°C
		—	15	—		V _R = 40V, T _J = +125°C
		—	0.04	0.30		V _R = 45V, T _J = +25°C
		—	18.0	—		V _R = 45V, T _J = +125°C
Typical Capacitance	C _T	—	120	—	pF	V _R = 4.0V, f = 1MHz

Notes: 5. Device mounted on 2inch*2inch Al board.
6. Short duration pulse test used to minimize self-heating effect.

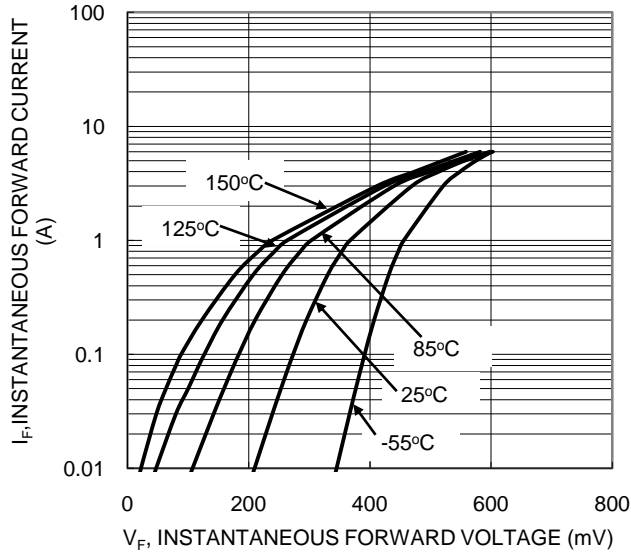


Figure 1. Typical Forward Characteristics

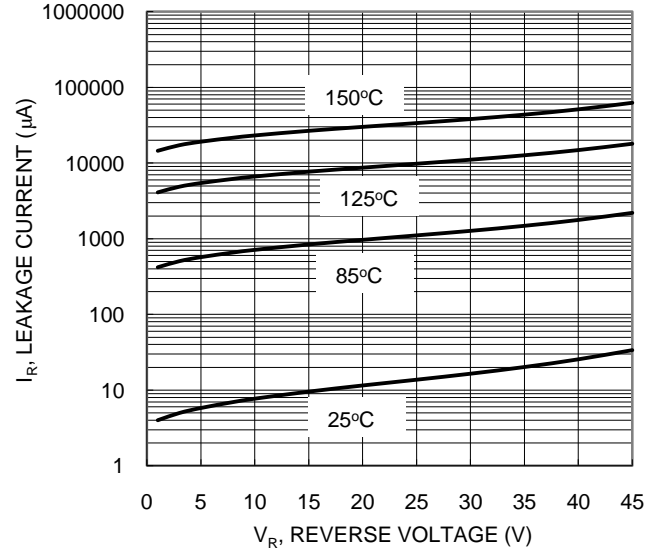


Figure 2. Typical Reverse Characteristics

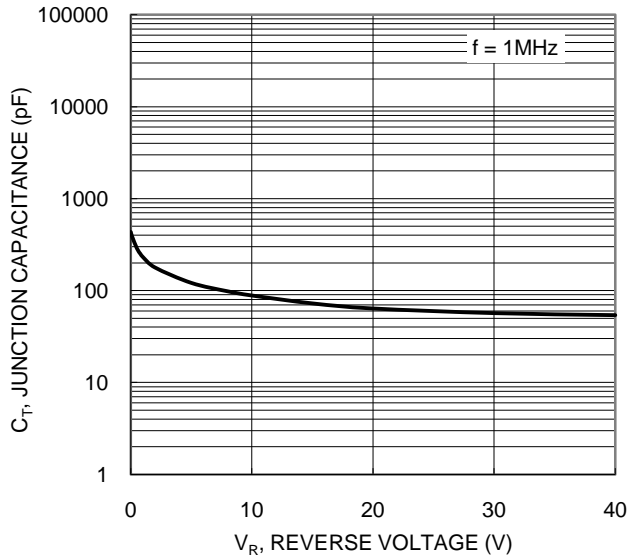


Figure 3. Typical Junction Capacitance

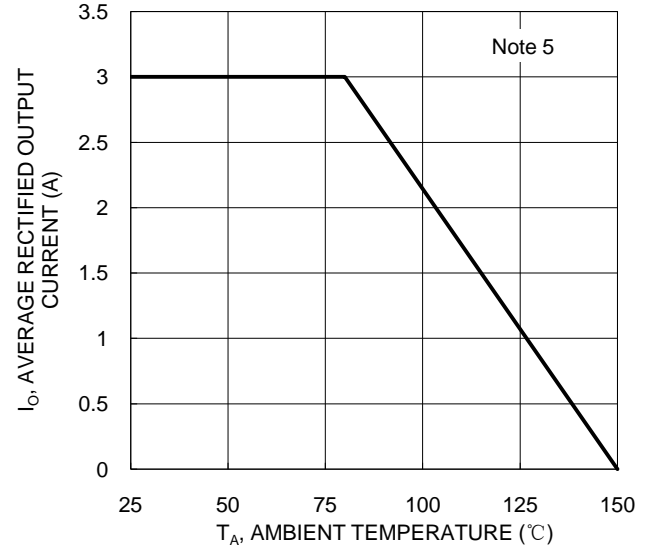


Figure 4. DC Forward Current Derating

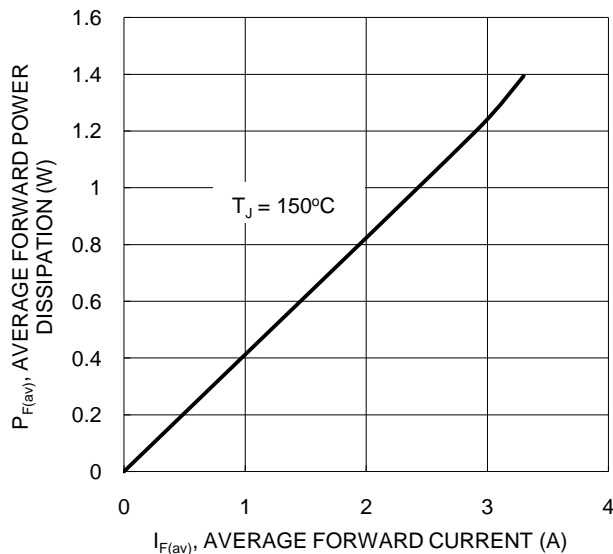
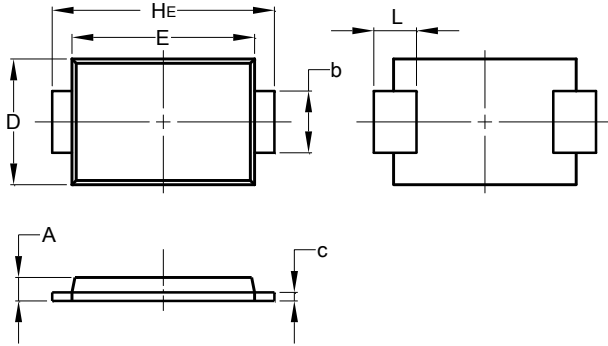


Figure 5. Forward Power Dissipation

Package Outline Dimensions

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

SMAF

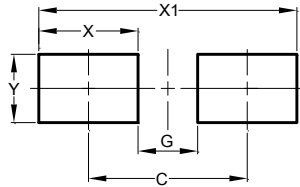


SMAF		
Dim	Min	Max
A	0.90	1.10
b	1.25	1.65
c	0.10	0.40
D	2.25	2.95
E	3.95	4.60
HE	4.80	5.60
L	0.50	1.50
All Dimensions in mm		

Suggested Pad Layout

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

SMAF



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

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