

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	B250AF	B260AF	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _{RM}	50	60	V
Average Rectified Output Current	lo	2	2	Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	5	0	А

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Ambient (Note 5)	$R_{\theta JA}$	95	°C/W
Typical Thermal Resistance Junction to Case (Note 5)	$R_{\theta JC}$	45	°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	Тур	Max	Unit	Test Condition
Forward Voltage Drop	V_{F}	_ _	0.55 0.52	0.65 —	V	$I_F = 2A$, $T_J = +25$ °C $I_F = 2A$, $T_J = +125$ °C
B250AF Leakage Current (Note 6) B260AF	I _R	_ _ _	0.015 0.02 15	0.10 0.20 —	mA	$V_R = 50V, T_J = +25^{\circ}C$ $V_R = 60V, T_J = +25^{\circ}C$ $V_R = 60V, T_J = +125^{\circ}C$
Typical Capacitance	C _T	_	80	_	pF	$V_R = 4.0V, f = 1MHz$

Notes:

- $5. \ \, \text{Device mounted on FR-4 substrate, 0.4"} \ \, \text{x 0.5", 2oz, single-sided, PC boards with 0.2"} \ \, \text{x 0.25" copper pad.}$
- 6. Short duration pulse test used to minimize self-heating effect.



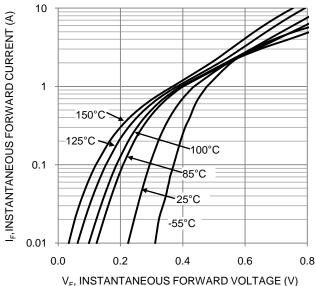


Figure 1. Typical Forward Characteristics

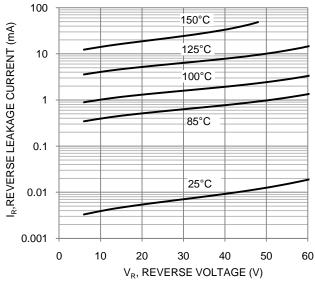


Figure 2. Typical Reverse Characteristics

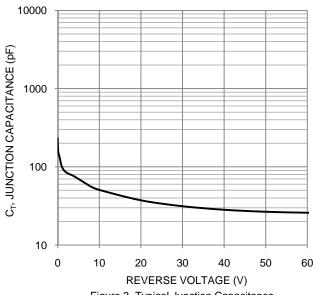


Figure 3. Typical Junction Capacitance

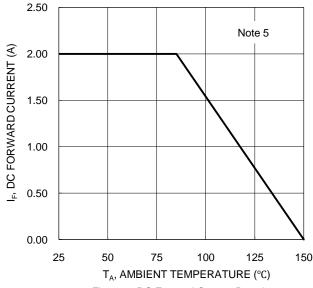


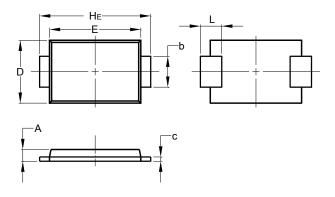
Figure 4. DC Forward Current Derating



Package Outline Dimensions

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

SMAF

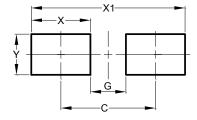


SMAF				
Dim	Min	Max		
Α	0.90	1.10		
b	1.25	1.65		
С	0.10	0.40		
D	2.25	2.95		
Е	3.95	4.60		
H _E	4.80	5.60		
L	0.50	1.50		
All Dimensions in mm				

Suggested Pad Layout

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

SMAF



Dimensions	Value (in mm)
С	4.00
G	1.50
Х	2.50
X1	6.50
Υ	1.70



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