

**ELECTRICAL CHARACTERISTICS** ( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	TYP.	MAX.	UNIT
Maximum instantaneous forward voltage per diode <sup>(1)</sup>	$I_F = 7.5\text{ A}$	$T_A = 25\text{ }^\circ\text{C}$	0.97	1.05	V
		$T_A = 125\text{ }^\circ\text{C}$	0.87	0.95	
Maximum reverse current per diode	rated $V_R$	$T_A = 25\text{ }^\circ\text{C}$	-	5.0	$\mu\text{A}$
		$T_A = 125\text{ }^\circ\text{C}$	90	250	
Typical junction capacitance per diode	4.0 V, 1 MHz	$C_J$	70	-	pF

**Note**

(1) Pulse test: 300  $\mu\text{s}$  pulse width, 1 % duty cycle

**THERMAL CHARACTERISTICS** ( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

PARAMETER	SYMBOL	BU1506	BU1508	BU1510	UNIT
Typical thermal resistance	$R_{\theta JC}$ <sup>(1)</sup>	2.5			$^\circ\text{C/W}$
	$R_{\theta JA}$ <sup>(2)</sup>	20			

**Notes**

(1) With 60 W air cooled heatsink

(2) Without heatsink, free air

**ORDERING INFORMATION** (Example)

PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
BU1506-E3/45	4.75	45	20	Tube
BU1506-E3/51	4.75	51	250	Paper tray
BU1506-M3/45	4.75	45	20	Tube
BU15065S-E3/45	4.75	45	20	Tube



**RATINGS AND CHARACTERISTICS CURVES** ( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise specified)

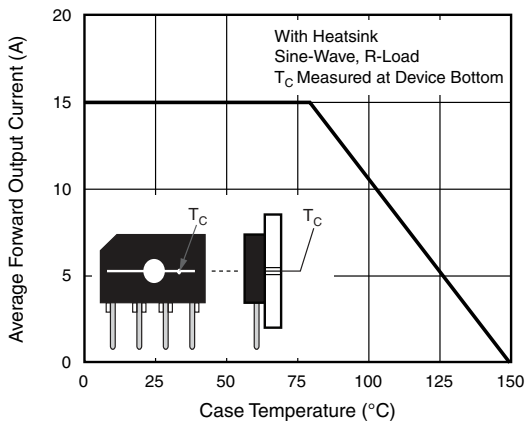


Fig. 1 - Derating Curve Output Rectified Current

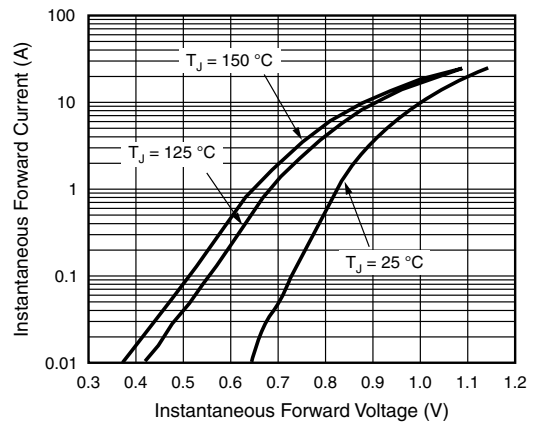


Fig. 4 - Typical Forward Characteristics Per Diode

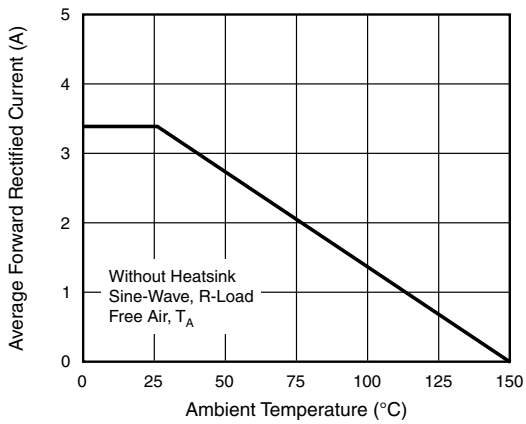


Fig. 2 - Forward Current Derating Curve

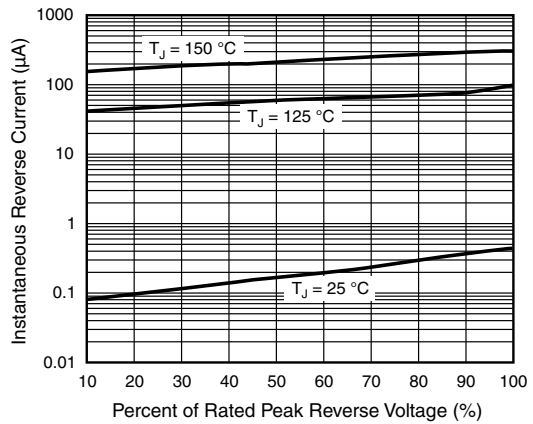


Fig. 5 - Typical Reverse Characteristics Per Diode

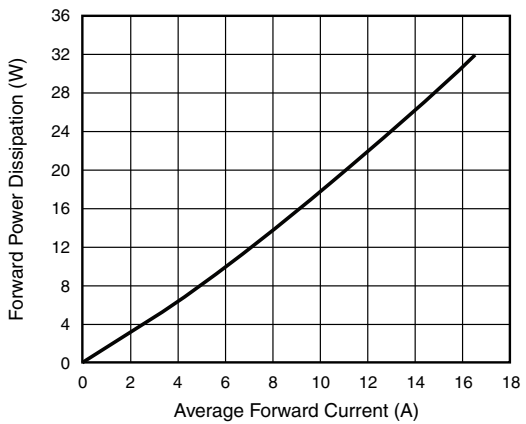


Fig. 3 - Forward Power Dissipation

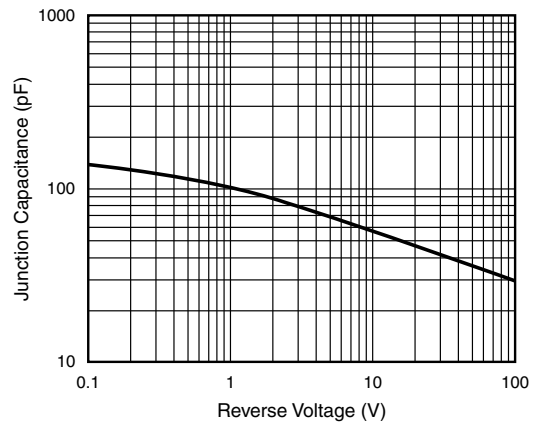
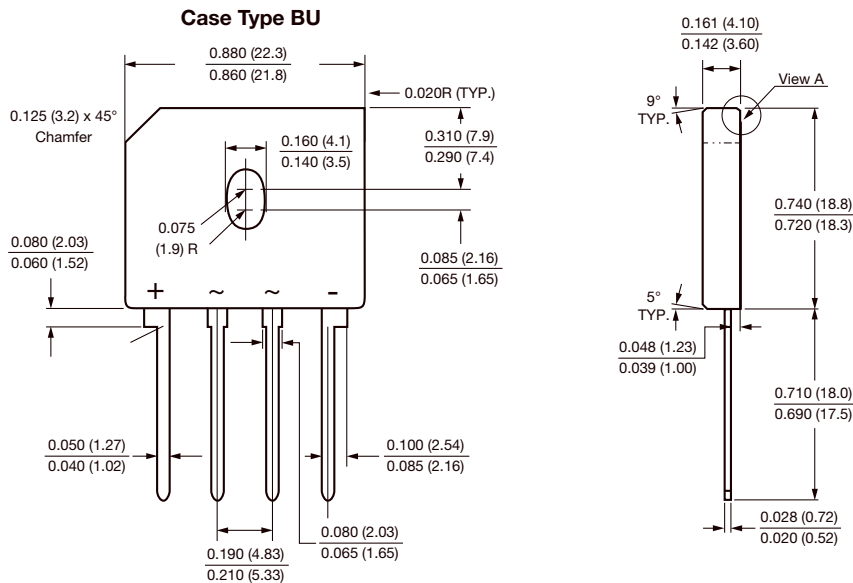


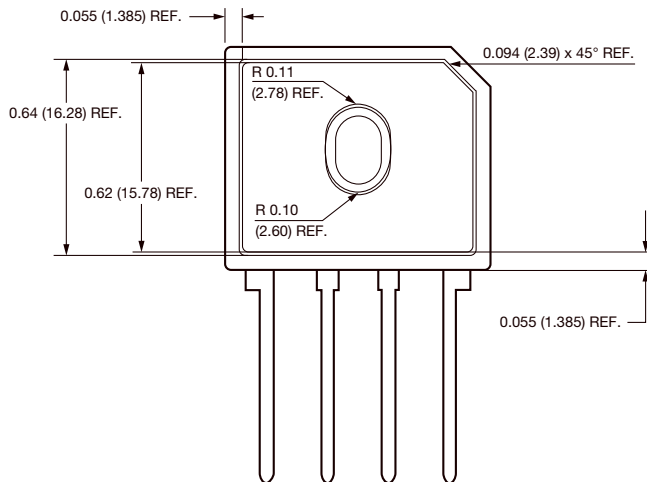
Fig. 6 - Typical Junction Capacitance Per Diode



**PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)

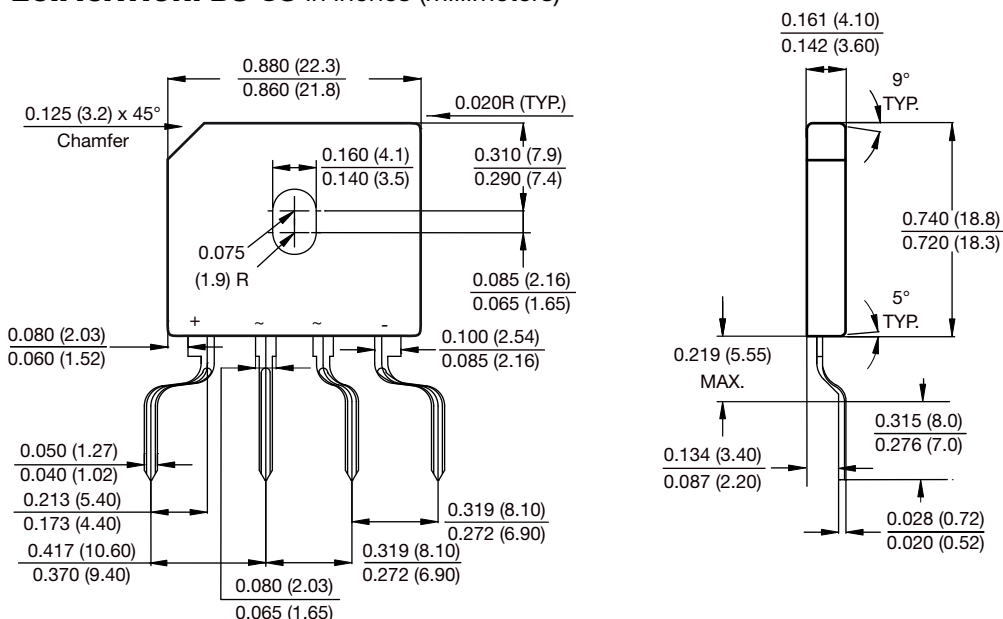


Polarity shown on front side of case, positive lead beveled corner



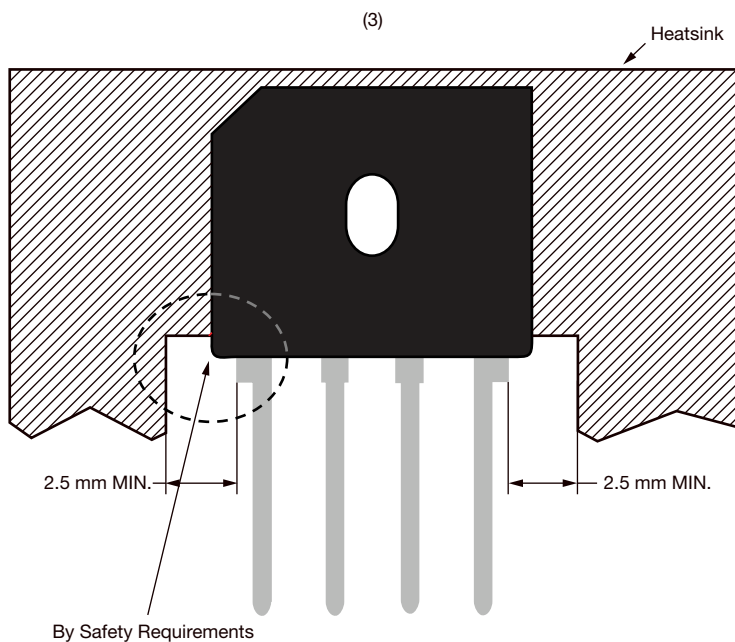


**FORMING SPECIFICATION: BU-5S** in inches (millimeters)



**APPLICATION NOTE**

1. Device UL approved for safety use dielectric strength of 1500 V.
2. If device is mounted in Floating Ground (F. G.) application, insulator is recommended to use to meet safety requirement.
3. Heat sink shape recommendation:





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