Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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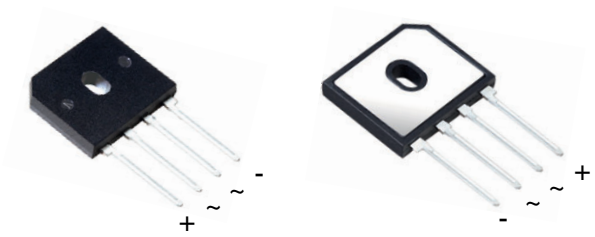
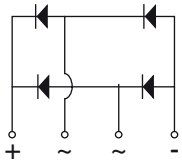
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Enhanced isoCink+™ Bridge Rectifiers



isoCink+™
Case Style BU



FEATURES

- UL recognition file number E312394
- Thin single in-line package
- Superior thermal conductivity
- Glass passivated chip junction
- Solder dip 275 °C max. 10 s, per JESD 22-B106
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS COMPLIANT
HALOGEN FREE Available

TYPICAL APPLICATIONS

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances and white-goods applications.

MECHANICAL DATA

Case: BU

Molding compound meets UL 94 V-0 flammability rating
Base P/N-E3 - RoHS-compliant, commercial grade
Base P/N-M3 - halogen-free, RoHS-compliant, and commercial grade

Terminals: matte tin plated leads, solderable per J-STD-002 and JESD 22-B102
E3 and M3 suffix meet JESD 201 class 1A whisker test

Polarity: as marked on body

Mounting Torque: 10 cm-kg (8.8 inches-lbs) max.

Recommended Torque: 5.7 cm-kg (5 inches-lbs)

PRIMARY CHARACTERISTICS	
$I_{F(AV)}$	25 A
V_{RRM}	600 V, 800 V
I_{FSM}	300 A
I_R	5 µA
V_F at I_F = 12.5 A	0.87 V
T_J max.	175 °C
Package	BU
Circuit configuration	In-line

MAXIMUM RATINGS (T_A = 25 °C unless otherwise noted)

PARAMETER		SYMBOL	BU25H06	BU25H08	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	600	800	V
Average rectified forward current (Fig. 1, 2)	T_C = 60 °C (1)	I_O	25		A
	T_A = 25 °C (2)		3.5		
Non-repetitive peak forward surge current, 8.3 ms single sine-wave, T_J = 25 °C		I_{FSM}	300		A
Rating for fusing (t < 8.3 ms) T_J = 25 °C		I^2t	373		A^2s
Operating junction and storage temperature range		T_J, T_{STG}	-55 to +175		°C

Notes
(1) With 60 W air cooled heatsink
(2) Without heatsink, free air

ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)

PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT
Maximum instantaneous forward voltage per diode (1)	I_F = 12.5 A	T_A = 25 °C	V_F	0.97	1.05	V
		T_A = 125 °C		0.87	0.95	
Maximum reverse current per diode	rated V_R	T_A = 25 °C	I_R	-	5.0	µA
		T_A = 125 °C		120	350	
Typical junction capacitance per diode	4.0 V, 1 MHz		C_J	125	-	pF

Note
(1) Pulse test: 300 µs pulse width, 1 % duty cycle

THERMAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)				
PARAMETER	**SYMBOL**	**BU25H06**	**BU25H08**	**UNIT**
Typical thermal resistance	$R_{\theta JC}$ (1)	2.5		°C/W
	$R_{\theta JA}$ (2)	24		

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**
BU25H06-E3/P	4.84	P	20	Tube
BU25H06-E3/A	4.84	A	250	Paper tray
BU25H06-M3/P	4.84	P	20	Tube

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise specified)

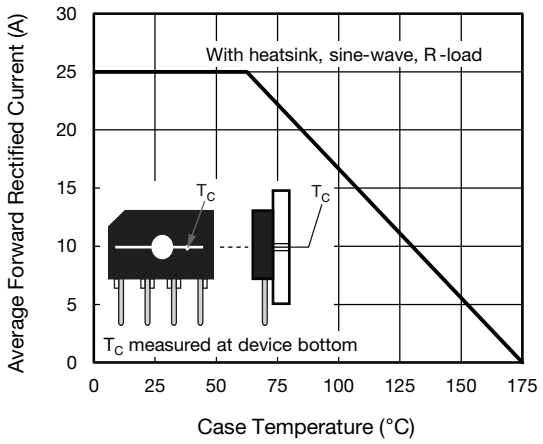


Fig. 1 - Derating Curve Output Rectified Current

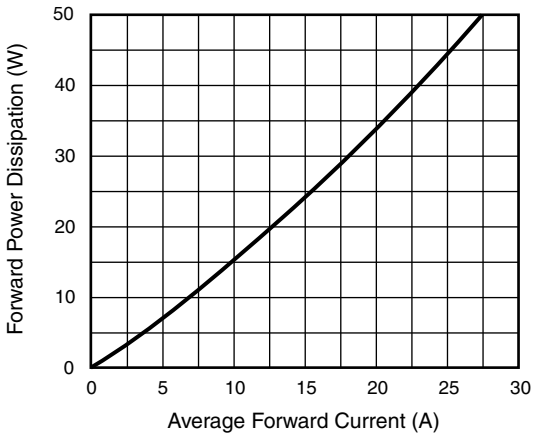


Fig. 3 - Forward Power Dissipation

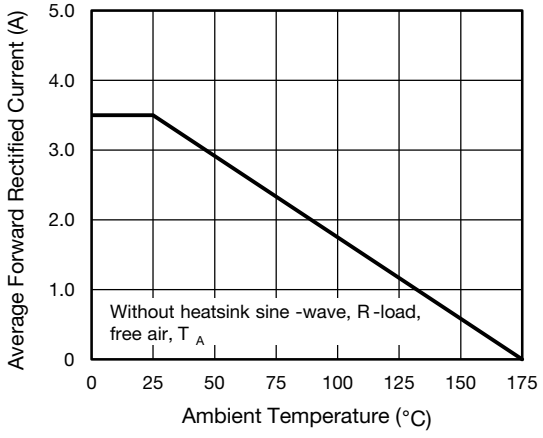


Fig. 2 - Forward Current Derating Curve

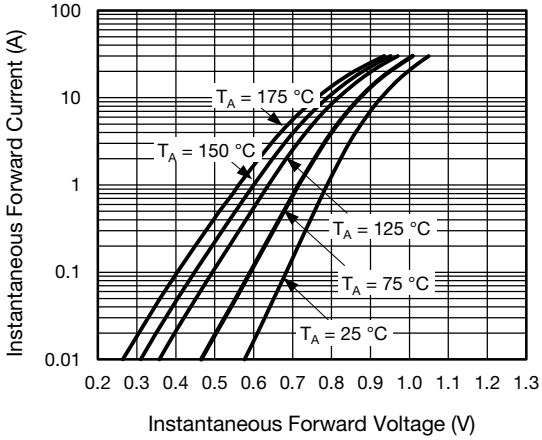


Fig. 4 - Typical Forward Characteristics Per Diode

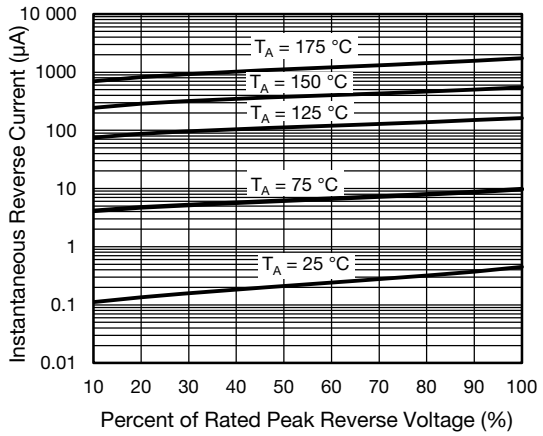


Fig. 5 - Typical Reverse Characteristics Per Diode

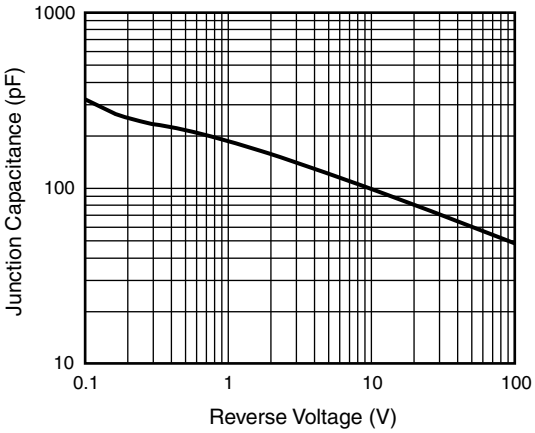
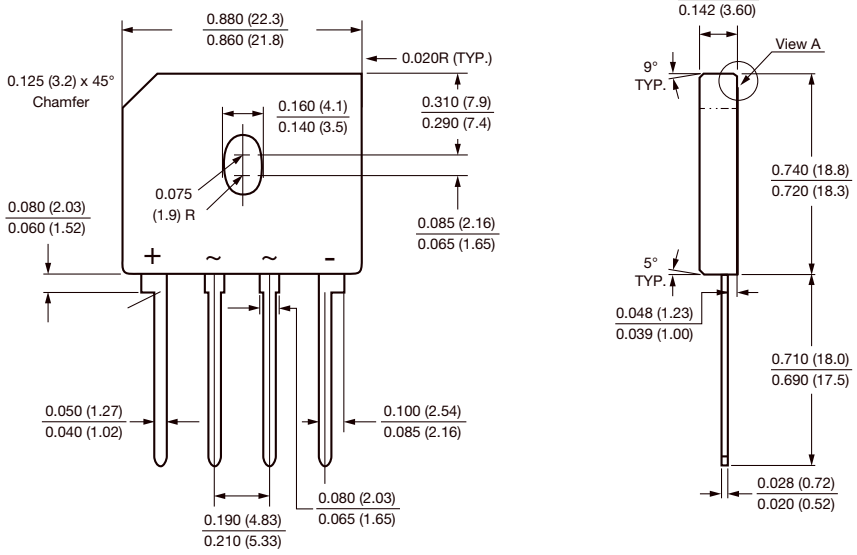


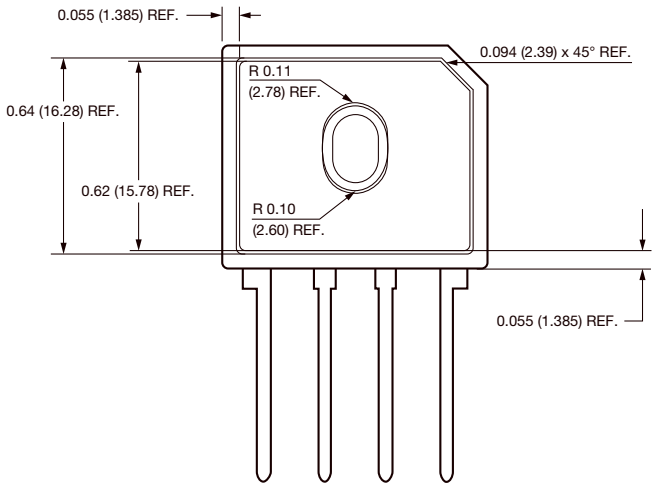
Fig. 6 - Typical Junction Capacitance Per Diode

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

Case Type BU



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



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