

# **Bridge Rectifiers**

### **Features**

- UL recognition, file #E230084
- Glass passivated chip junction
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### **Typical Applications**

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

### **Mechanical Data**

• Package: PB

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, Halogen free

• Terminals: Tin plated leads, solderable per

J-STD-002 and JESD22-B102
• Polarity: As marked on body

# ■Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	PB3510H
Device marking code				PB3510H
Maximum Repetitive Peak Reverse Voltage		VRRM	V	1600
Maximum RMS Voltage		VRMS	V	1120
Maximum DC blocking Voltage		VDC	V	1600
Average rectified output current	With heatsink Tc =100°C	l <sub>o</sub>	А	35.0
@60Hz sine wave, R-load	Without heatsink Ta =25℃			4.2
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Ti=25°C		I <sub>FSM</sub>	А	400
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C				800
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode		l²t	A <sup>2</sup> s	664
Storage temperature		T <sub>stg</sub>	°C	-55 ~ +150
Junction temperature		Tj	°C	-55 ~ +150
Dielectric strength @ Terminals to case, AC 1 minute		Vdis	KV	2.5
Mounting torque @Recommend torque: 5kg·cm		Tor	kg·cm	8

# **■Electrical Characteristics** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	PB3510H	
Maximum instantaneous forward voltage drop per diode	VF	٧	IFM=17.5A	1.1	
Maximum DC reverse current at rated DC	IR	μА	T <sub>j</sub> =25°C	5	
blocking voltage per diode	ır.		T <sub>j</sub> =125°C	200	
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	150	



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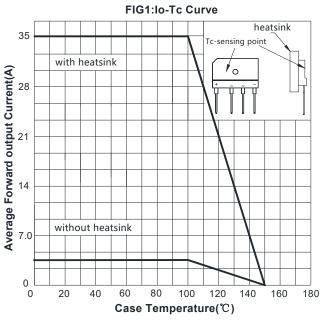
PARAMETER		SYMBOL	UNIT	PB3510H
Typical Thermal Resistance	Between junction and ambient, Without heatsink	R <sub>0J-A</sub>	0000	15
	Between junction and case, With heatsink	R <sub>0J-C</sub>	°C/W	0.8

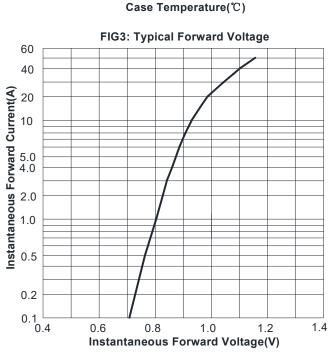
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

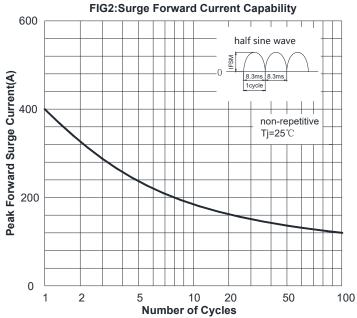
**■Ordering Information** (Example)

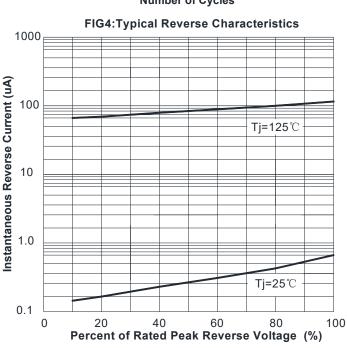
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
PB3510H	B1	Approximate 7.5	15	750	1500	TUBE

# **■ Characteristics** (Typical)





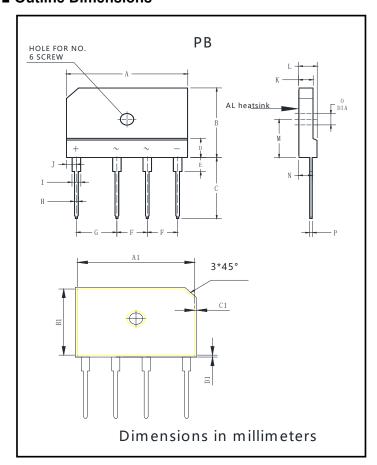








# **■ Outline Dimensions**



РВ					
Dim	Min	Max			
Α	29.7	30.3			
В	19.7	20.3			
С	17.0	18.0			
D	4.8	5.8			
Е	3.8	4.2			
F	7.3	7.7			
G	9.8	10.2			
Н	0.9	1.1			
I	2.0	2.4			
J	2.3	2.7			
K	3.4	3.8			
L	4.4	4.8			
М	10.8	11.2			
N	3.1	3.7			
0	3.1	3.4			
Р	0.6	0.8			
A1	28.75	29.15			
B1	18.75	19.15			
C1	0.3	0.7			
D1	0.3	0.7			



# **PB3510H**

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