

High Current Automobile Rectifier

Reverse Voltage - 19 to 24Volts
Forward Current - 50 Amperes

Features

- Better heat dissipation
- Forward Voltage Drop
- High reliability
- Adopt a vacuum solder techniques

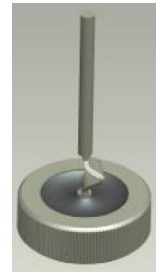
Mechanical Data

- Case: Press-Fit
- Polarity:P= ANODE ON LEAD WIRE, N= CATHODE ON LEAD WIRE
- Case: HITACHI molded plastic

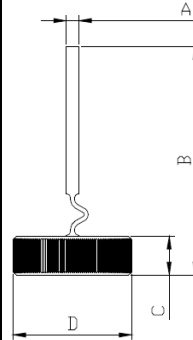
Applications

- Generally applied in alternator, motorbike , automobile, etc.

HITACHI



RoHS
COMPLIANT



SYM	Size
A	$\Phi 1.5(0.059)\pm 0.05(0.002)$
B	28 MAX(1.102)
C	$4.0(0.157)\pm 0.1(0.004)$
D	$\Phi 12.80(0.504)\pm 0.04(0.002)$

Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	HRB50P	Unit
Peak Repetitive Reverse Voltage @Irrm=100mA	VBR	19-24	V
Maximum RMS Voltage	VRRM	16	V
Maximum Transient Peak Reverse Current (Tw=80ms, Tc=25°C)	IRSM	50	V
Maximum Average Forward Current IO@Tc=170°C 60HZ, resistive or inductive load	I(AV)	50	A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	600	A
Maximum Inst. Forward Voltage Drop, IF at 100Amp	VF	1.05	V
Maximum DC Reverse Current at Rated @Tj=25°C	IR	1	uA
Peak Repetitive Reverse Voltage @Tj=195°C		100	
Maximum Thermal Resistance Junction to Ambient	RθJA	0.6	°C/W
Operating Junction Temperature Range	TJ	-40to+200	°C
Storage Temperature Range	TSTG	-40to+200	°C

Fig. 1 - Forward Current Derating Curve

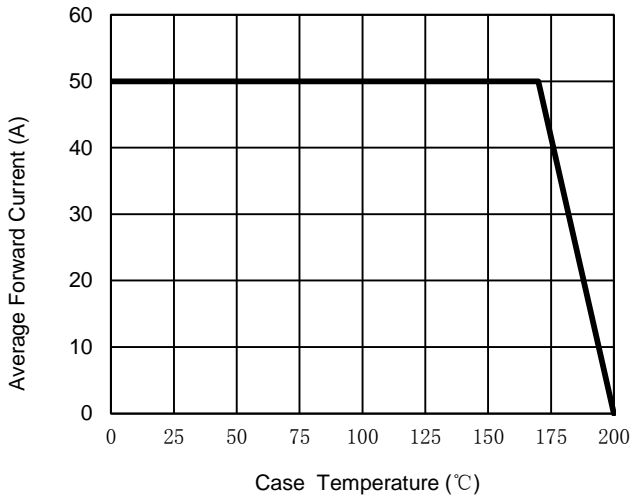


Fig. 2 - Maximum Non-Repetitive Surge Current

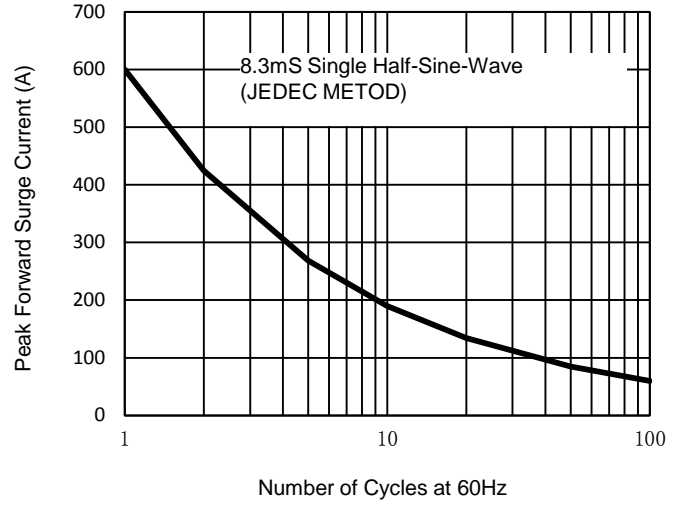


Fig. 3 - Typical Reverse Characteristics

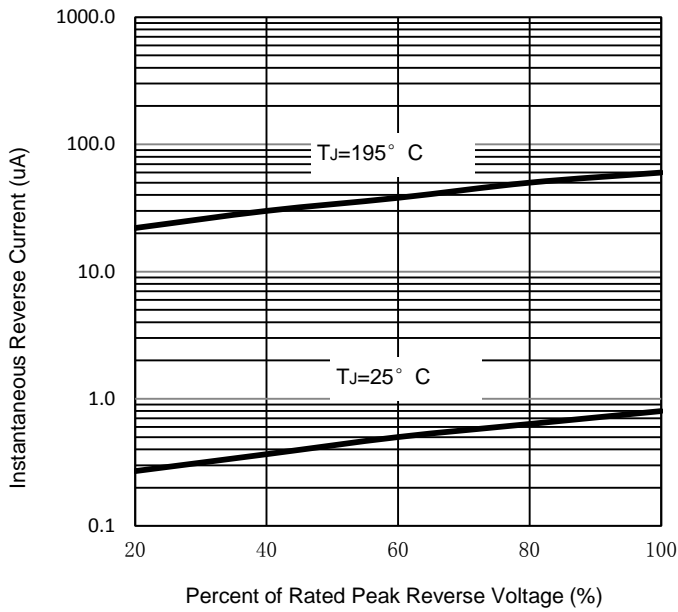
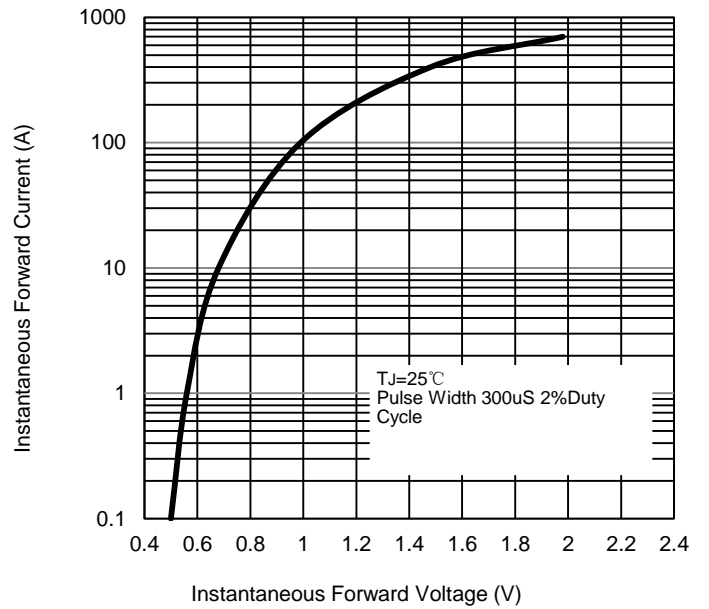


Fig. 4 - Typical Forward Characteristics





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