High Current Automobile Rectifier

Reverse Voltage - 19 to 24Volts

Forward Current - 50 Amperes

Features

- Better heat dissipation
- Low power loss
- High reliability
- High surge forward current capability

Mechanical Data

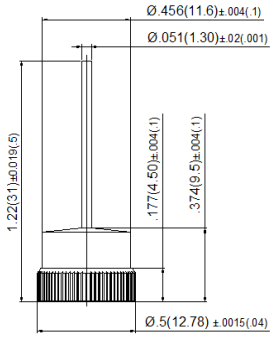
- Case: Press-Fit
- Polarity:P= ANODE ON LEAD WIRE, N= CATHODE ON LEAD WIRE

Applications

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

PRESS-FIT

RoHS COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

Characteristics	Symbol	DB50P(N)	Unit
Reverse Breakdown Voltage @Irrm=100mA	V_{BR}	19-24	V
Peak Repetitive Reverse Voltage	V_{RRM}	16	V
Maximum Transient Peak Reverse Current (Tw=80ms, Tc=25℃)	I_{RSM}	50	V
Maximum Average Forward Current IO@Tc=170℃ 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)	I_{FSM}	600	A
Maximum Inst. Forward Voltage Drop,IF at 100Amp	V_F	1.05	V
Maximum DC Reverse Current at Rated @T_J=25℃ Peak Repetitive Reverse Voltage @T_J=195℃	I_R	1 100	uA
Maximum Thermal Resistance Junction to Ambient	$R_{\theta JA}$	0.6	℃/W
Operating Junction Temperature Range	T_J	-40to+200	℃
Storage Temperature Range	T_{STG}	-40to+200	℃

DB50*-S-00/99-00/01

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Fig. 1 - Forward Current Derating Curve

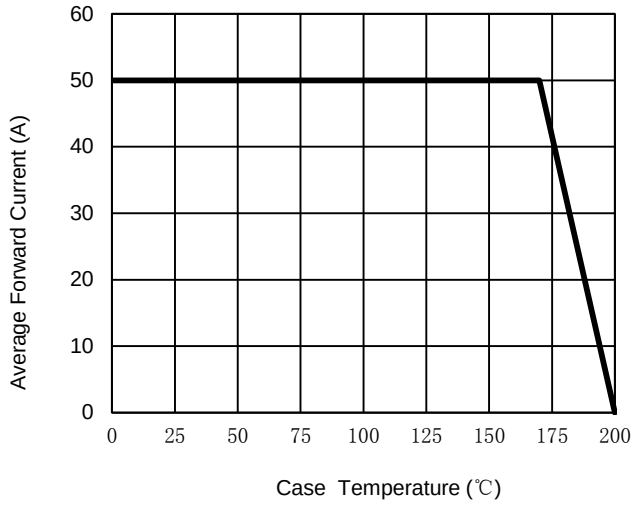


Fig. 2 - Maximum Non-Repetitive Surge Current

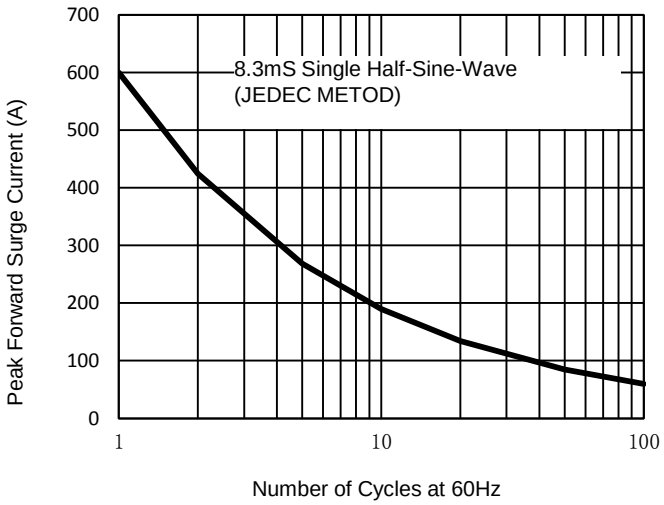


Fig. 3 - Typical Reverse Characteristics

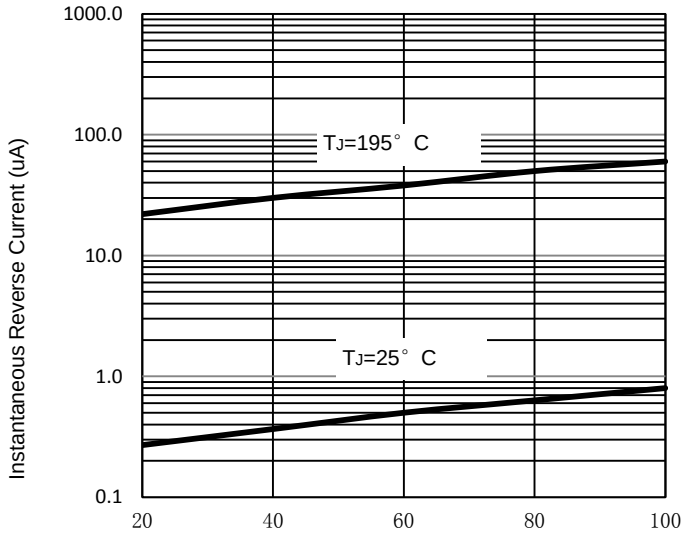
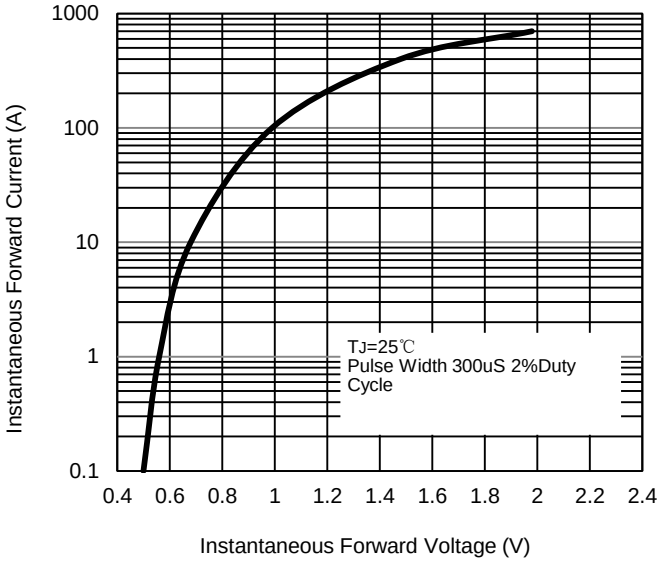


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.

Disclaimer

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