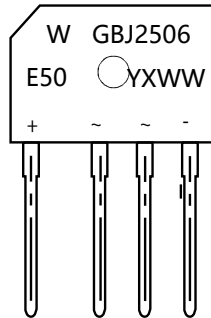


GBJ2506E50



PINNING

PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)

Features

- ~ Single phase half-wave rectifier
- ~ High efficiency
- ~ High reliability
- ~ High temperature stability
- ~ High surge current capability
- ~ High reverse voltage capability

Applications

- ~ Single phase half-wave rectifier
- ~ Power supply
- ~ Signal processing

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbol	GBJ2506E50	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Average Rectified Output Current	I_o	25.0	A
Reverse Recovery Time. $I_F=0.5A, I_R=1A, I_{RR}=0.25A$	T_{rr}	75	ns
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	300	A
$I^2 t$ rating for fusing ($1ms < t < 8.3ms$)	$I^2 t$	373	$A^2 S$
Dielectric Strength: Terminals to Case, AC 1 minute	V_{dis}	2.5	KV
Mounting torque	TOR	Recommended torque:0.5	N.m
Maximum Forward Voltage at 12.5A	V_F	1.75	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10 500	μA
Junction to ambient , without heatsink @ $T_A=25^\circ C$	$R_{\theta JA}$	22	$^\circ C/W$
Junction to case, with heatsink @ $T_A=125^\circ C$	$R_{\theta JC}$	2.3	
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^\circ C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

Fig.1: Current Derating Curve

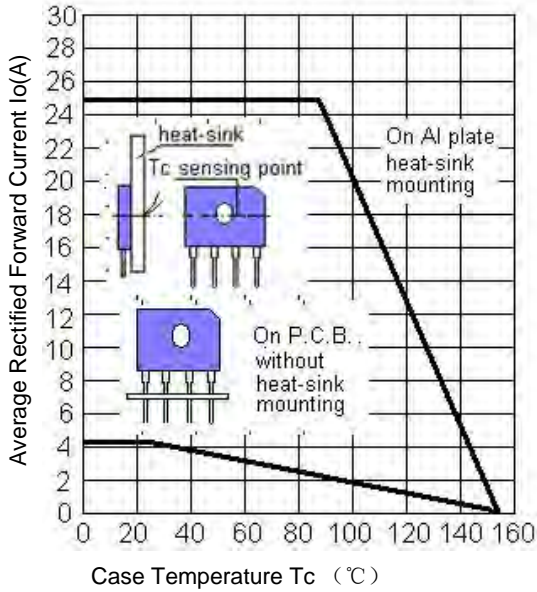


Fig.2 Typical Reverse Characteristics

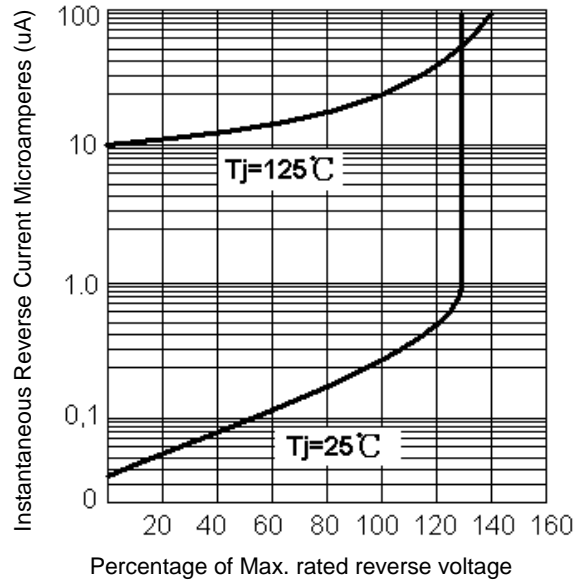


Fig.3: Max. Surge Current

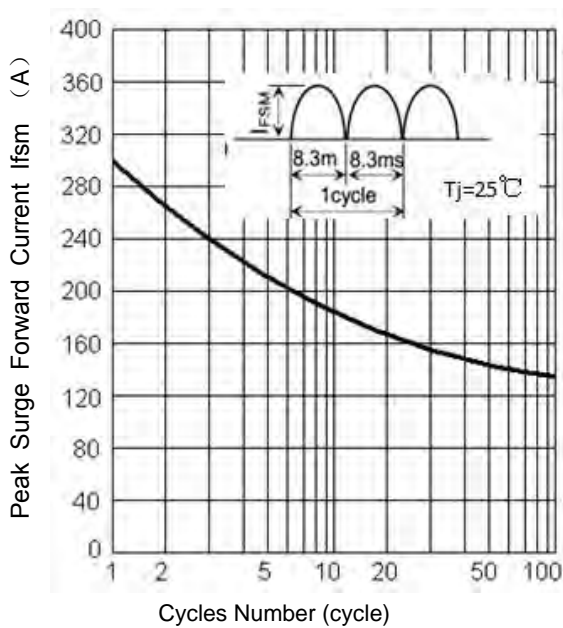
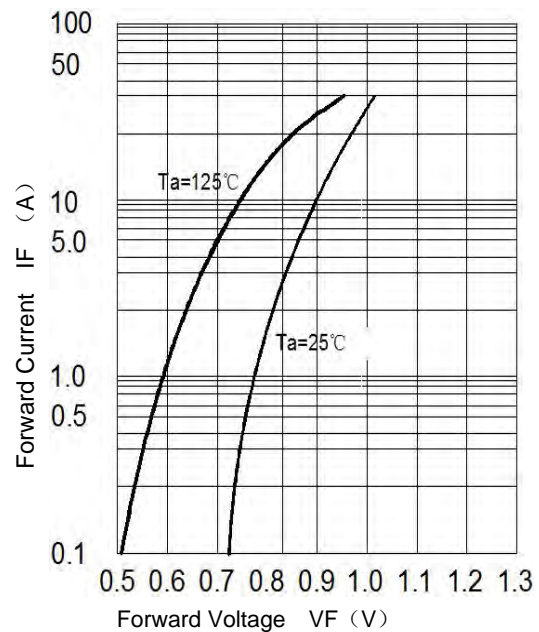
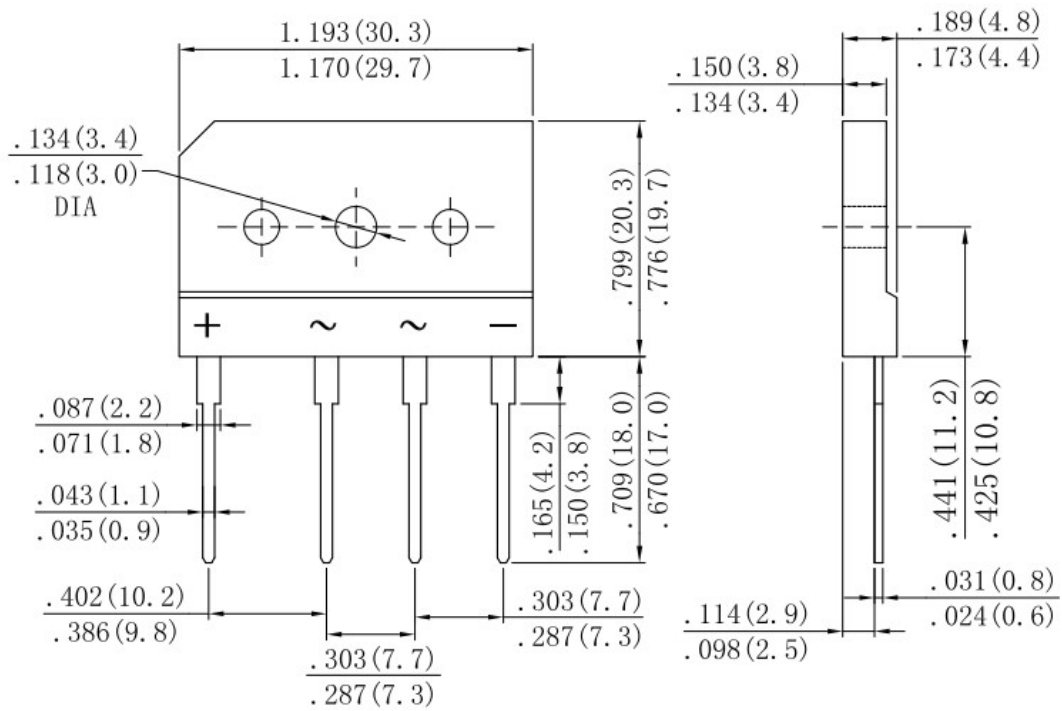


Fig.4: Rated Forward Features



PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)



Dimensions in inches and(millimeters)