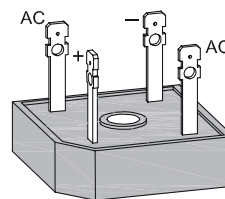


25.0A Single-Phase Bridge Rectifier

Features

- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed:
260°C/10 seconds, 5 lbs (2.3kg) tension
- RoHS Compliant



TB35



Mechanical Data

Case:	Molded plastic body with Metal Heat Sink
Polarity:	Polarity symbols marked on case
Terminals:	Plated 0.25" (6.35mm) lug
Mounting Position:	Thru hole for #10 screw, 20 in -lbs. torque max
Weight:	0.53 ounce, 15 grams

Maximum Ratings & Electrical Characteristics *(T_{Ambient}=25°C unless noted otherwise)*

Symbols	Description	TB2505	TB251	TB252	TB254	TB256	TB258	TB2510	Unit
VRRM	Max. recurrent peak reverse voltage	50	100	200	400	600	800	1000	V
VRMS	Max. RMS voltage	35	70	140	280	420	560	700	V
VDC	Max. DC blocking voltage	50	100	200	400	600	800	1000	V
Io(AV)	Max. average forward rectified current@ TC=50° C	25.0							A
IFSM	Peak forward surge current (JEDEC)	300							A
I²t	Rating for Fusing (t<8.3ms)	373							A²sec
VISO	Isolation Voltage from case to lugs	2500							V
Cj	Typical Capacitance Junction(per element)(Note 2)	300							pF
TJ	Operating junction temperature range	-65 to +150							° C
TSTG	Storage Temperature Range	-65 to +150							° C

25.0A SINGLE-PHASE BRIDGE RECTIFIER

TB2505 -TB2510

Symbol	Description	TB2505	TB251	TB252	TB254	TB256	TB258	TB2510	Unit
V_F	Maximum Instantaneous Forward Voltage Drop Per Leg@12.5 A	1.1							V
I_R	Maximum DC Reverse Current Rated DC Blocking Voltage	10.0							uA
	$T_A=25^{\circ}\text{C}$	500							uA
R_{θ-JC}	Maximum Thermal Resistance (Note 3)	2.0							° C/W

NOTES:

1. 8.3ms single half sine-wave superimposed on rated load (JEDEC method).
2. Measured at 1MHz and applied reverse voltage of 4.0Volts D.C.
3. Thermal resistance junction to case mounted on heat sink.

Typical Characteristics Curves

Fig.1- Typical Forward Current Derating Curve

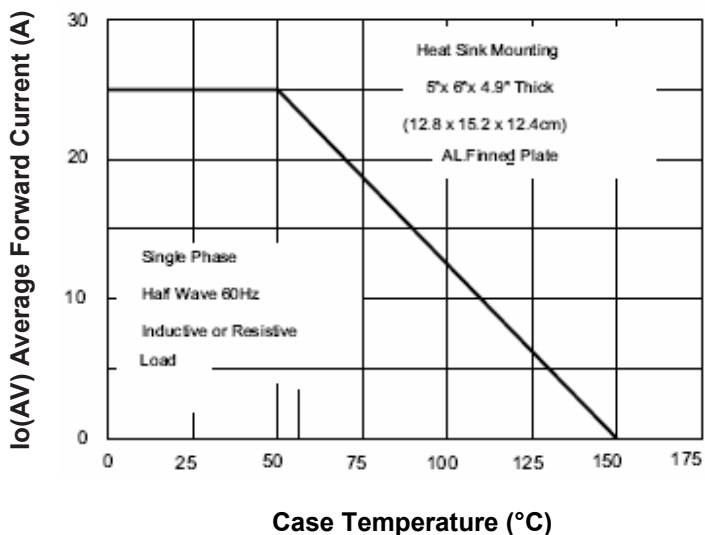
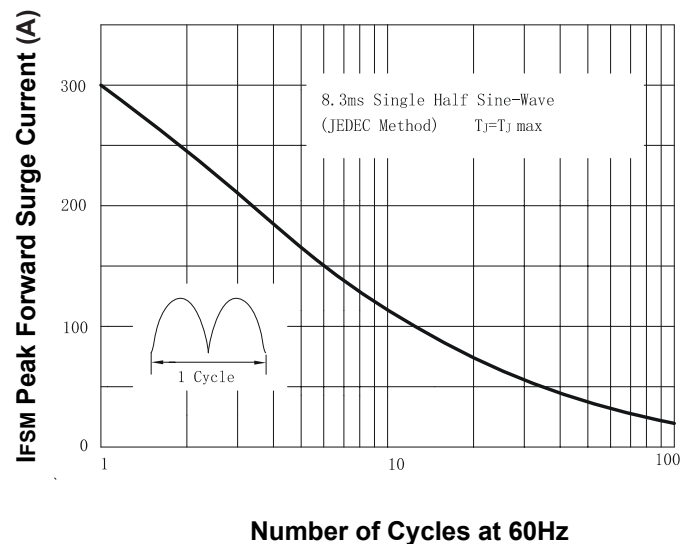


Fig.2-Max. Non-repetitive Peak Forward Surge Current



25.0A SINGLE-PHASE BRIDGE RECTIFIER

TB2505 -TB2510

Fig.3- Typical Instantaneous Forward Characteristics

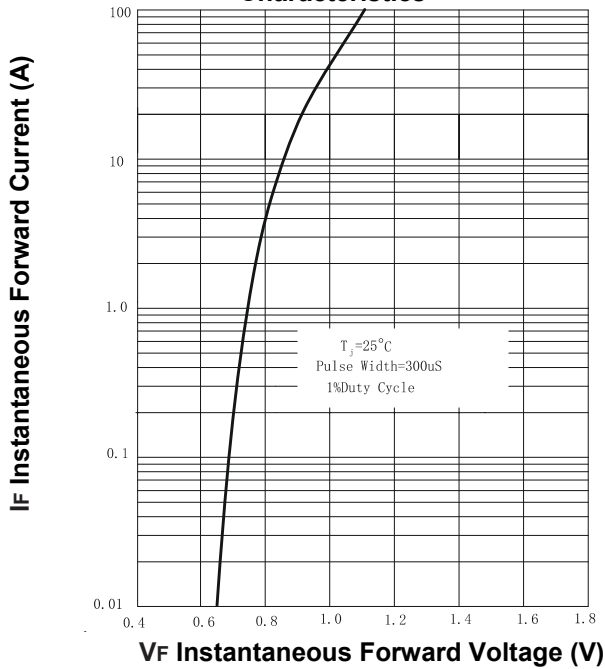


Fig.4- Typical Reverse Characteristics

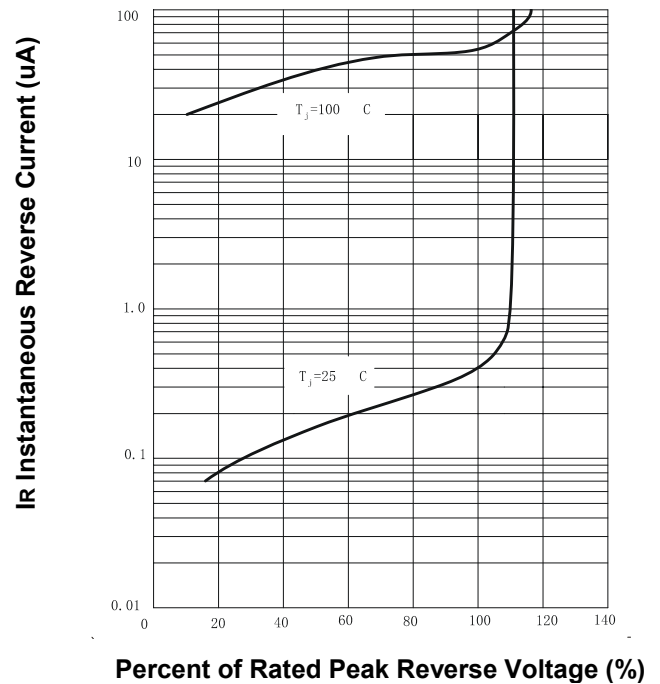
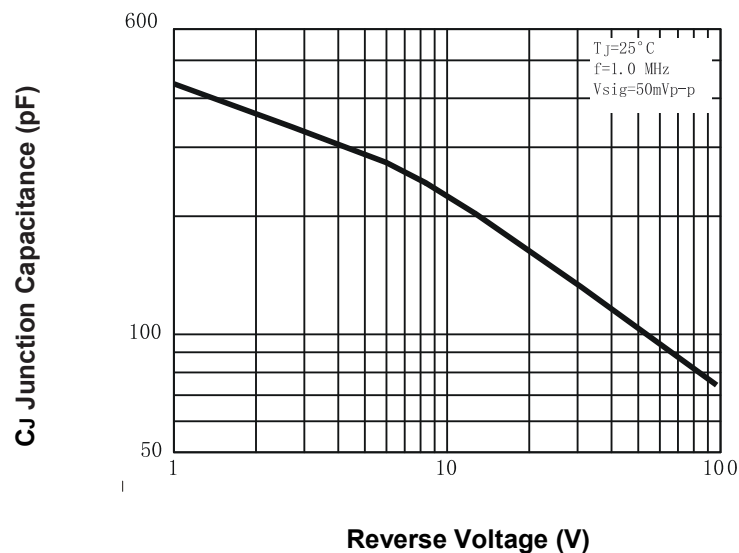


Fig.5-Typical junction capacitance

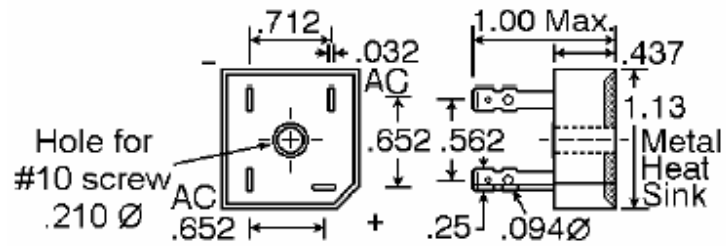


25.0A SINGLE-PHASE BRIDGE RECTIFIER

TB2505 -TB2510

Dimensions in inches (mm)

TB35



25.0A SINGLE-PHASE BRIDGE RECTIFIER

TB2505 -TB2510

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