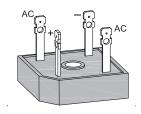


TB2505 -TB2510

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









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 (Tambient=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	RMS voltage 35 70 140 280 420 560 700		700	V				
VDC	Max. DC blocking voltage	50	100	200	400	600	800	1000	V
lo(AV)	Max. average forward rectified current@ TC=50° C	25.0						Α	
IFSM	Peak forward surge current (JEDEC)	300							А
l²t	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	
Тѕтс	Storage Temperature Range	-65 to +150						° C	

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TB2505 -TB2510

Symbol	Descr	iption	TB2505	TB251	TB252	TB254	TB256	TB258	TB2510	Unit
VF	Maximum Insta Forward Voltag Drop Per Leg@	1.1							V	
lR	Maximum DC Reverse Current Rated DC Blocking Voltage	T _A =25° C	10.0							uA
		Ta=100° C				500				uA
R ₀ -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

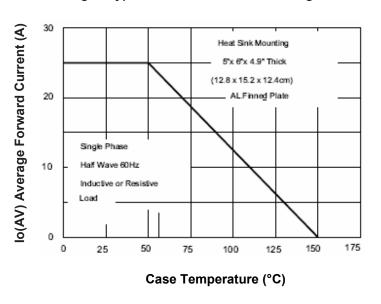
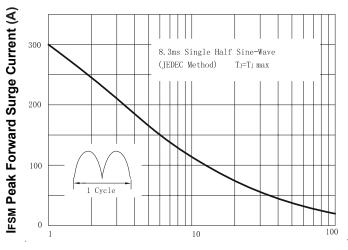


Fig.2-Max. Non-repetitive Peak Forward Surge Current



Number of Cycles at 60Hz



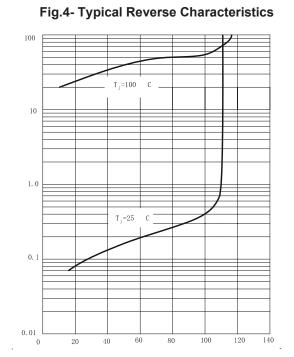
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IF Instantaneous Forward Current (A)

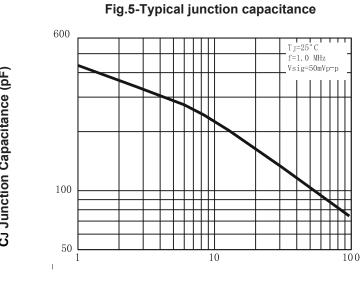
Fig.3- Typical Instantaneous Forward Characteristics 10 T_j=25°C Pulse Width=300uS VF Instantaneous Forward Voltage (V)

R Instantaneous Reverse Current (uA)



Percent of Rated Peak Reverse Voltage (%)

CJ Junction Capacitance (pF)



Reverse Voltage (V)

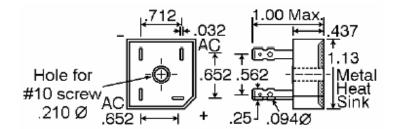


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TB2505 -TB2510

Dimensions in inches (mm)

TB35





TB2505 -TB2510

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