



10A SCHOTTKY BARREIER RECTIFIER

Features

- Metal of silicon rectifier,majority carrier conducton
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- For use in low voltage,high frequency inverters,free whelling, and polarity protection applications

Maximum Ratings

- T_{stg} ——Storage Temperature..... - 55~175
- T_j ——Operating Temperature..... - 55~150
- V_{RRM} ——Peak Repetitive Reverse Voltage..... 40V
- V_{RWM} —— Working Peak Reverse Voltage.....40V
- V_R ——DC Blocking Voltage..... 40V
- $V_{R(RMS)}$ ——RMS Reverse Voltage..... 28V
- $I_{K(AV)}$ ——Average Recified Output Current@ $T_c=105$ Double Dies 10A
(Note 1)Single Die 5A
- I_{FSM} ——Non-Repetitive Peak Forward Surge Current (60Hz)125A

Electrical Characteristics @ $T_a=25$ unless otherwise specified

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

For capacitive load,derate current by 20%.

Characteristic	Symbol	Min	Max	Unit	Condition
Forward Voltage Drop(Note 1)	V_{FM}		0.7 0.84 0.57	V	$I_F=5A, T_C=25$ $I_F=10A, T_C=25$ $I_F=5A, T_C=125$
Peak Reverse Current at Rated DC Blocking Voltage	I_{RM}		0.1 15	mA	$V_R = V_{RRM} T_C=25$ $T_C=125$
Typical Junction Capacitance(Note 2)	C_j		170	pF	
Typical Thermal Resistance Junction to Case(Note 3)	R_{th-j}		3.0	/W	

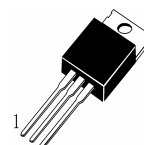
NOTES : 1. 300us Pulse Width, 2% Duty Cycle.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

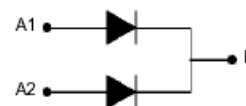
3. Thermal Resistance Junction to Case. .

Package

TO-220



1— Pin A1
2— Pin K
3— Pin A2





PERFORMANCE CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

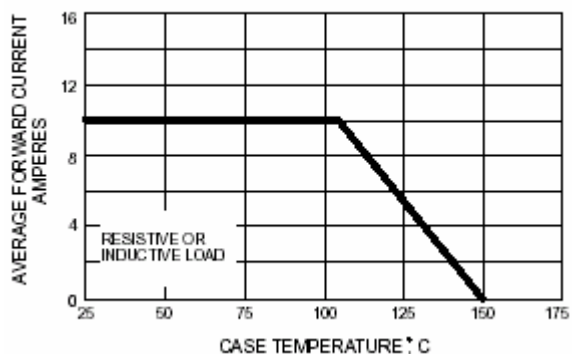


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

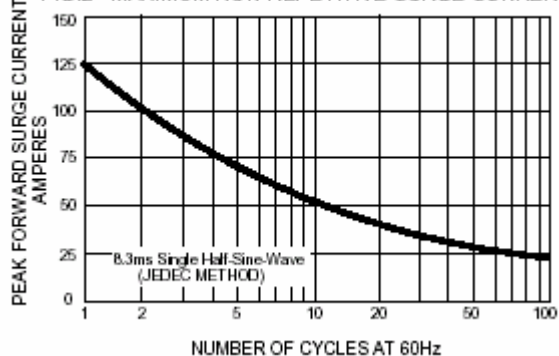


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

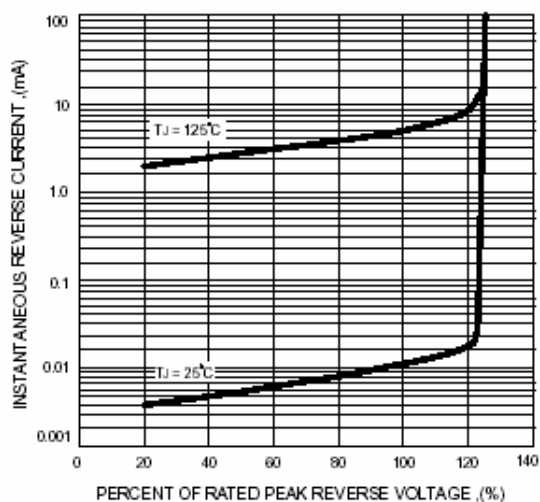


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

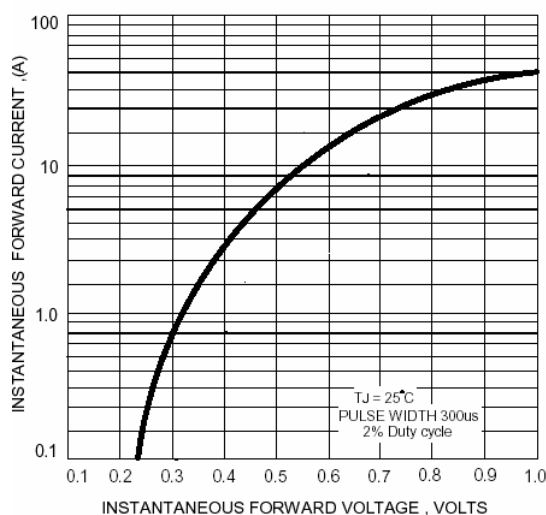


FIG.5 - TYPICAL JUNCTION CAPACITANCE

