



## 10A SCHOTTKY BARREIER RECTIFIER

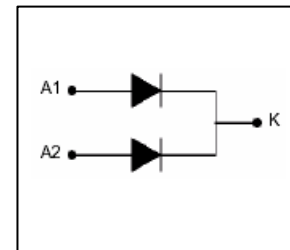
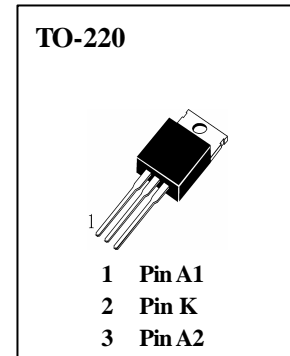
### Features

- 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
- $I_{F(AV)}$ —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

### Package



### 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. .



## PERFORMANCE CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

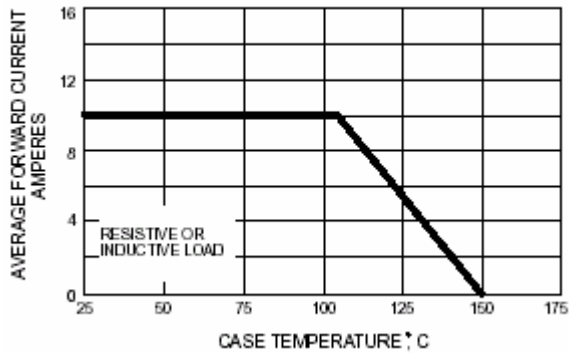


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

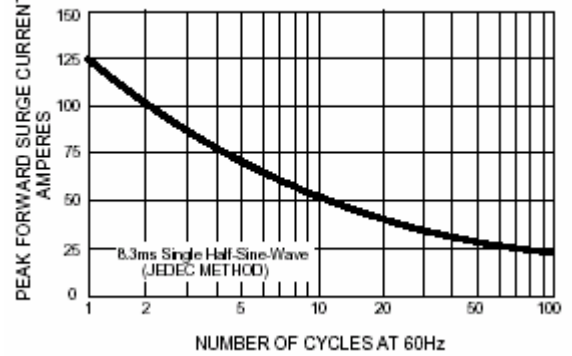


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

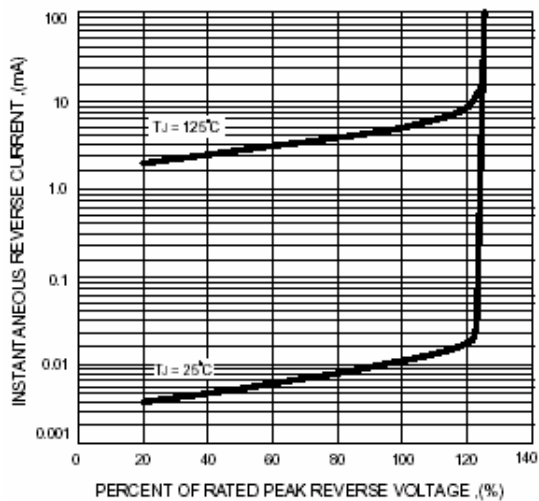


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

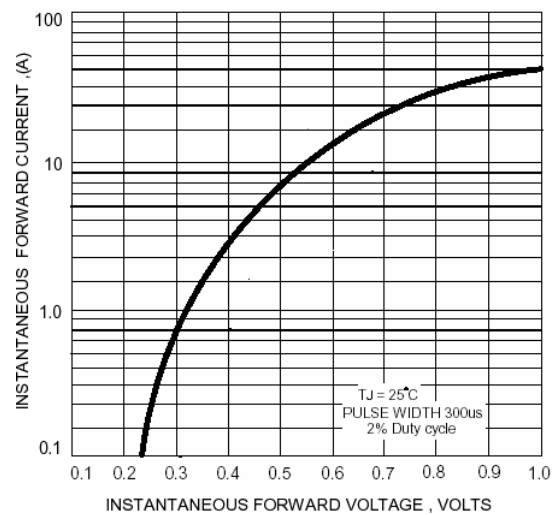


FIG.5 - TYPICAL JUNCTION CAPACITANCE

