

# Schottky Barrier Rectifier

# TST30H100CW

### FEATURES

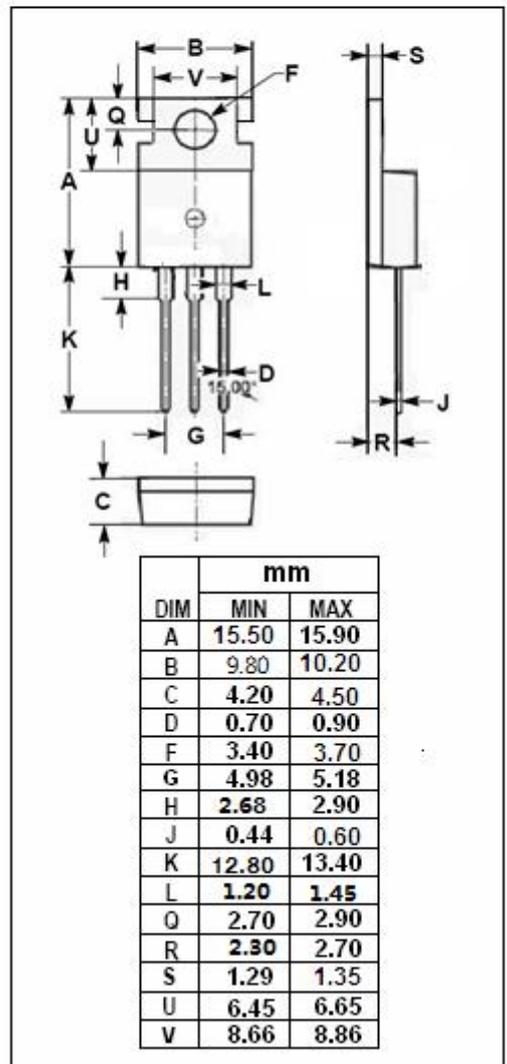
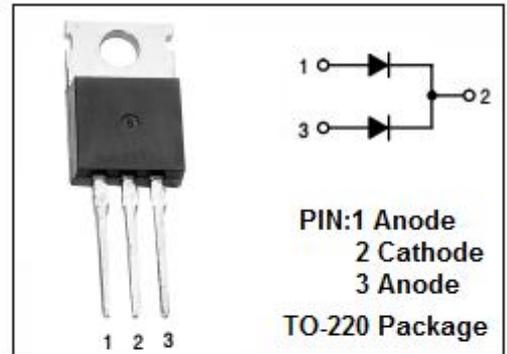
- Plastic material used carriers Underwriter Laboratory
- Metal silicon junction, majority carrier conduction
- Low Power Loss,high Efficiency
- Guard ring for overvoltage protection
- High Surge Capability,High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- For use in low voltage,high frequency inverters,free wheeling and polarity protection applications.

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>VRWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	100	V
I <sub>F(AV)</sub>	Average Rectified Forward Current per devics per diode	30 15	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	200	A
T <sub>J</sub>	Junction Temperature	-55~150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



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**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.2	$^{\circ}C/W$

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle  $\leq$  1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F = 15A ; T_c = 25^{\circ}C$	0.69	V
		$I_F = 15A ; T_c = 125^{\circ}C$	0.61	
$I_R$	Maximum Instantaneous Reverse Current	$V_R = V_{RWM} ; T_c = 25^{\circ}C$	0.25	mA
		$V_R = V_{RWM} ; T_c = 125^{\circ}C$	35	

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