

Power Schottky Rectifier

STPS20120CT

FEATURES

- Low Power Loss,high Efficiency
- High Surge Capability,High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

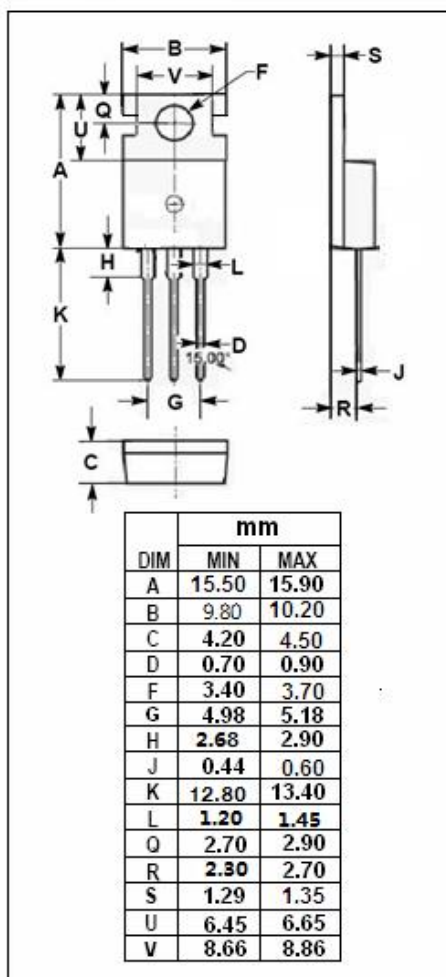
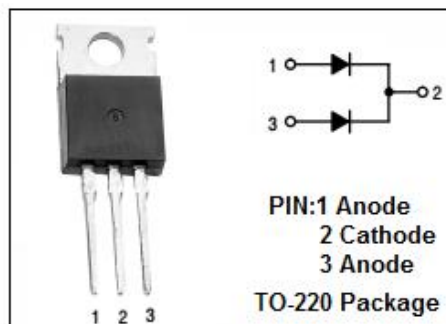
- For use in low voltage,high frequency inverters,free wheeling and polarity protection applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER		VALUE	UNIT
V _{RRM}	Peak Repetitive Reverse Voltage		120	V
I _{F(RMS)}	RMS Forward current		30	A
I _{F(AV)}	Average Forward Current	per diode per device	10 20	A
I _{FSM}	Nonrepetitive Peak Surge Current tp=10 ms sinusoidal		150	A
T _J	Junction Temperature		175	℃
T _{stg}	Storage Temperature Range		-65~175	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	1.8	°C/W



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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Instantaneous Forward Voltage	$I_F = 2.5A ; T_C = 25^{\circ}C$	0.7	V
		$I_F = 2.5A ; T_C = 125^{\circ}C$	0.58	
		$I_F = 10A ; T_C = 25^{\circ}C$	0.92	
		$I_F = 10A ; T_C = 125^{\circ}C$	0.74	
		$I_F = 20A ; T_C = 25^{\circ}C$	1.02	
		$I_F = 20A ; T_C = 125^{\circ}C$	0.86	
I_R	Instantaneous Reverse Current	$V_R = V_{RRM}, T_C = 25^{\circ}C$	0.01	mA
		$V_R = V_{RRM}, T_C = 125^{\circ}C$	5	

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