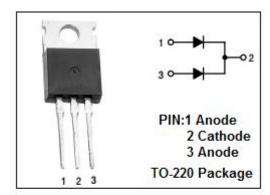


High Voltage Power Schottky Rectifier

STPS20100CT

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

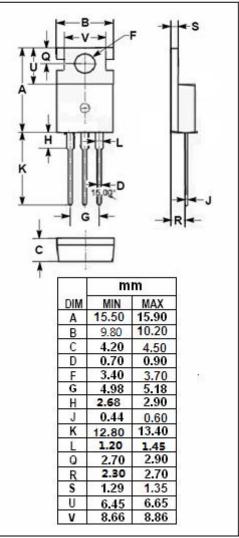


APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		100	V
IF(RMS)	RMS Forward current		30	А
I _{F(AV)}	Average Rectified Forward Current Tc=110°C VR=60V	per diode per device	10 20	А
IFSM	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions tp=10 ms sinusoidal		200	А
T_J	Junction Temperature		175	$^{\circ}$
T _{stg}	Storage Temperature Range		-65~175	$^{\circ}$
dv/dt	Voltage Rate of Change (Rated V _R)		1000	V/μs





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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER		UNIT
R _{th j-c}	Thermal Resistance, Junction to Case per diode Total	1.6 0.9	°C/W
R _{th(c)}	Coupling	0.15	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
VF	Maximum Instantaneous Forward Voltage	I _F = 20A ; Tc= 25 ℃	0.95	V
		I _F =20A ; Tc=125℃	0.70	
I _R	Maximum Instantaneous Reverse Current	V _R = V _{RWM} ;Tc= 25°C	0.15	- mA
		V _R = V _{RWM} ;Tc= 125°C	100	

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