

Schottky Barrier Rectifier

SBR20U100CT

FEATURES

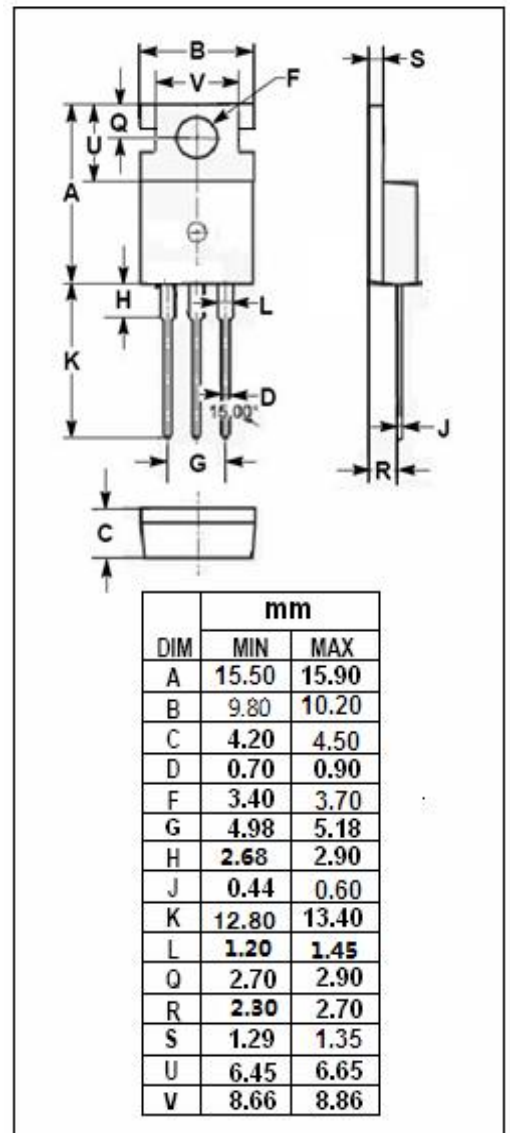
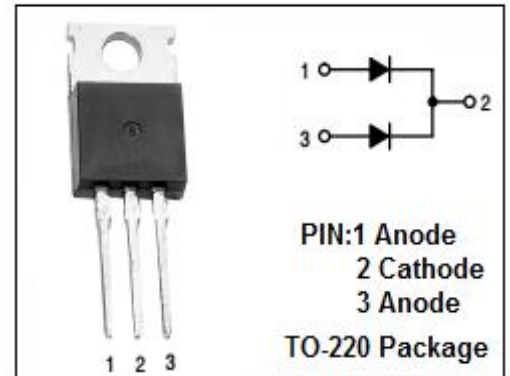
- With TO-220 packaging
- Soft, fast switching capability
- 150°C operating junction temperature
- Ultralow forward voltage drop
- High frequency operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Converters
- Free-wheeling diodes
- Reverse battery protection
- Center tap configuration

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RMS} V _R	Peak repetitive reverse voltage RMS voltage DC blocking voltage	100	V
I _{F(AV)}	Average rectified forward current @T _c = 140°C	20	A
I _{FSM}	Nonrepetitive peak surge current (8.3ms single half sine-wave superimposed on rated load conditions)	200	A
T _J	Junction temperature	-65~175	°C
T _{stg}	Storage temperature range	-65~175	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance, junction to case	2.0	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum instantaneous forward voltage	I _F = 10A; T _C = 25°C I _F = 10A; T _C =125°C I _F = 20A; T _C = 25°C	0.70 0.63 0.82	V
I _R	Maximum instantaneous reverse current (Short duration pulse test used to minimize self-heating effect)	V _R = rated V _{RRM} ; T _C = 25°C V _R = rated V _{RRM} ; T _C = 125°C	0.5 25	mA

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