

Schottky Barrier Rectifier

SBR60A200CT

FEATURES

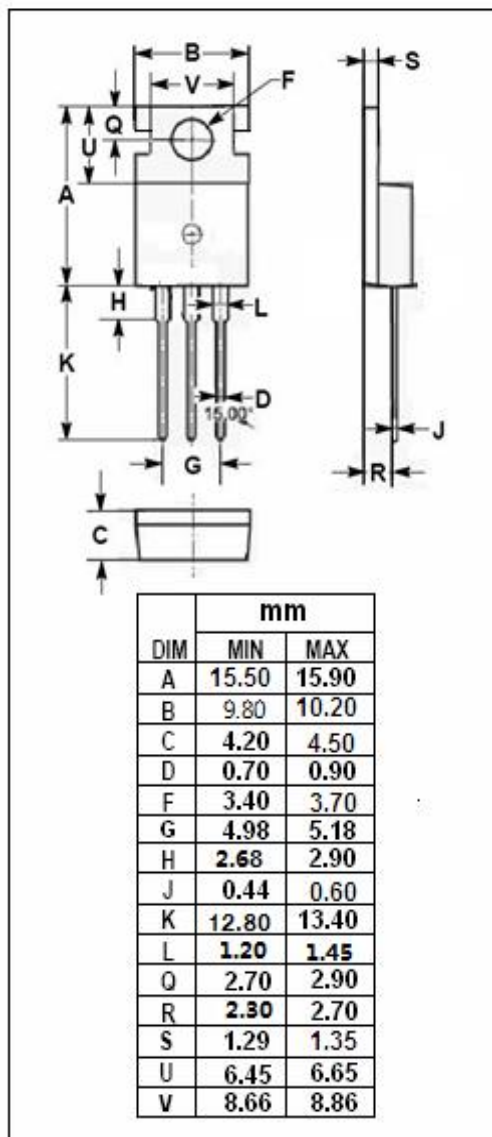
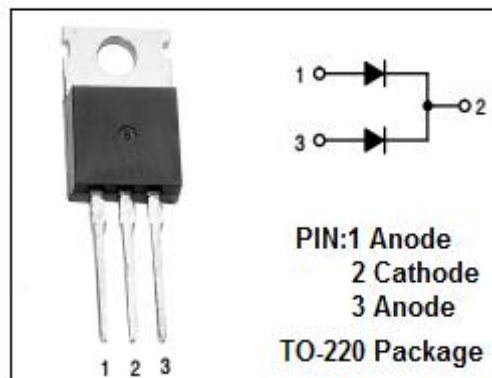
- With TO-220 packaging
- Soft, fast switching capability
- Low forward voltage drop
- Low leakage current
- High frequency operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER		VALUE	UNIT
V_{RRM} V_{RMS} V_R	Peak repetitive reverse voltage RMS voltage DC blocking voltage		200	V
$I_{F(AV)}$	Average rectified forward current	Per Leg Total	30 60	A
I_{FSM}	Nonrepetitive peak surge current (8.3ms single half sine-wave superimposed on rated load conditions)		250	A
T_J	Junction temperature		-65~175	$^{\circ}\text{C}$
T_{stg}	Storage temperature range		-65~175	$^{\circ}\text{C}$



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance, junction to case	1.2	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum instantaneous forward voltage	$I_F = 30A$; $T_c = 25^\circ C$ $I_F = 30A$; $T_c = 125^\circ C$	0.96 0.77	V
I_R	Maximum instantaneous reverse current (Short duration pulse test used to minimize self-heating effect)	$V_R = \text{rated } V_{RRM}$; $T_c = 25^\circ C$ $V_R = \text{rated } V_{RRM}$; $T_c = 125^\circ C$	0.1 20	mA
t_{rr}	Reverse recovery time	$I_F = 0.5A$; $I_R = 1A$; $I_{RR} = 0.25A$	50	ns

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