

Schottky Barrier Rectifier

MBR40L60CT

FEATURES

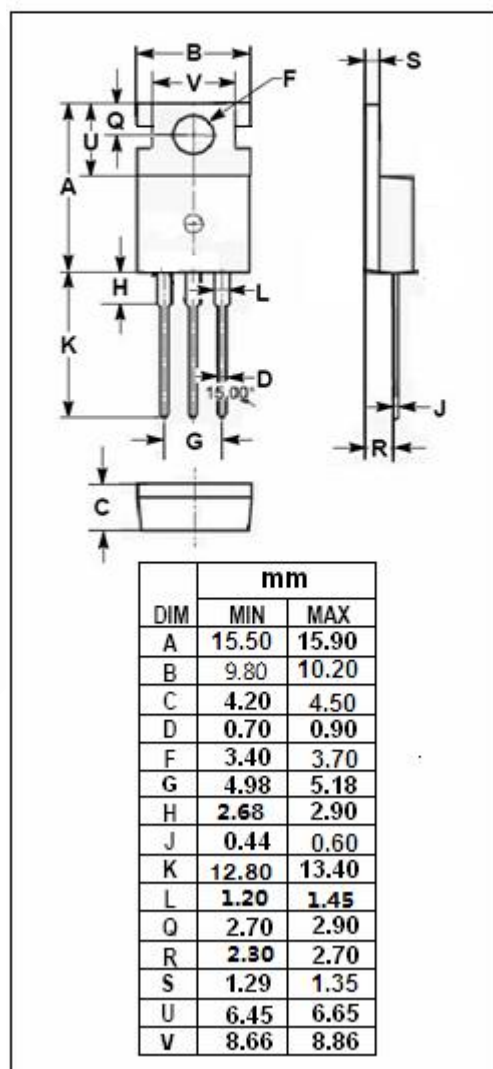
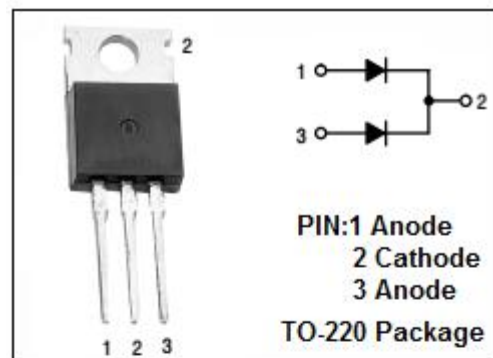
- Low Forward Voltage
- Low Power Loss, High Efficiency
- High Surge Capability
- 150°C Operating Junction Temperature
- Pb-Free Package is Available
- Guard -Ring for Stress Protection
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

MECHANICAL CHARACTERISTICS

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	60	V
$I_{F(AV)}$	Average Rectified Forward Current (Per Leg) (Rated V_R) $T_C = 130^{\circ}\text{C}$ (Per Device)	20 40	A
I_{FSM}	Peak Forward Surge Current, 8.3 ms single halfsine-wave superimposed on rated load (JEDEC method)	240	A
T_J	Junction Temperature	-55~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~175	$^{\circ}\text{C}$



Schottky Barrier Rectifier**MBR40L60CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.8	$^{\circ}\text{C/W}$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	70	$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS(Pulse Test: Pulse Width $\leq 300\ \mu\text{s}$, Duty Cycle $\leq 2.0\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 20\text{A}, T_C = 25^{\circ}\text{C}$ $I_F = 20\text{A}, T_C = 125^{\circ}\text{C}$ $I_F = 40\text{A}, T_C = 25^{\circ}\text{C}$ $I_F = 40\text{A}, T_C = 125^{\circ}\text{C}$	0.61 0.58 0.81 0.74	V
I_R	Maximum Instantaneous Reverse Current	Rated DC Voltage, $T_C = 25^{\circ}\text{C}$ Rated DC Voltage, $T_C = 125^{\circ}\text{C}$	0.55 17.5	mA