

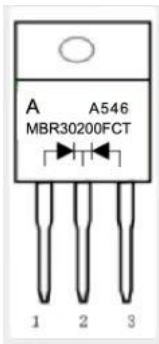


MBR30200FCT Schottky Barrier Diode

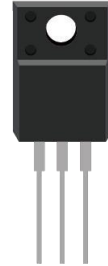
Feature

- Low Forward Voltage
- High Efficiency, Low Power Loss
- RoHS Compliant

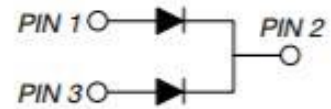
MARKING:



TO-220F



Pin Configuration



ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	200	V
Average Rectified Forward Current	$I_{F(AV)}$	30	A
Non-repetitive Peak Forward Surge Current	I_{FSM}	400	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	4	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	175	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-40~+175	

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 5\text{A}(T_A=25^\circ\text{C})$		0.78		V
		$I_F = 5\text{A}(T_A=125^\circ\text{C})$		0.64		
		$I_F = 10\text{A}(T_A=25^\circ\text{C})$		0.85		
		$I_F = 10\text{A}(T_A=125^\circ\text{C})$		0.72		
		$I_F = 15\text{A}(T_A=25^\circ\text{C})$		0.90		
		$I_F = 15\text{A}(T_A=125^\circ\text{C})$		0.77		
Reverse Current@ $V_{RRM} = 200\text{V}$	I_R	$T_A=25^\circ\text{C}$		0.5	3	μA
		$T_A=125^\circ\text{C}$		0.8		mA

Typical Characteristics

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

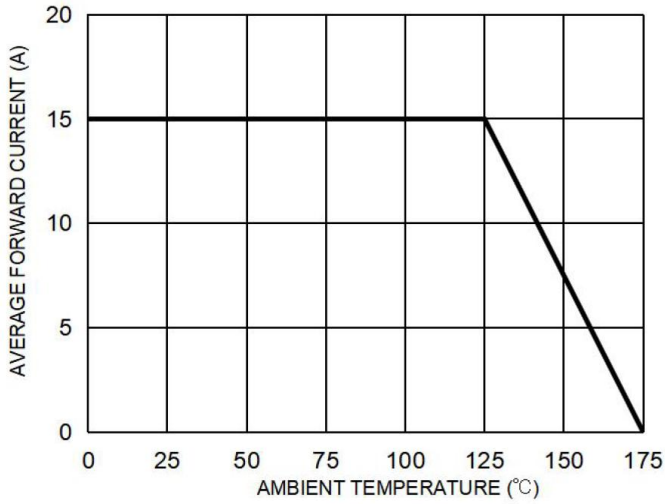


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

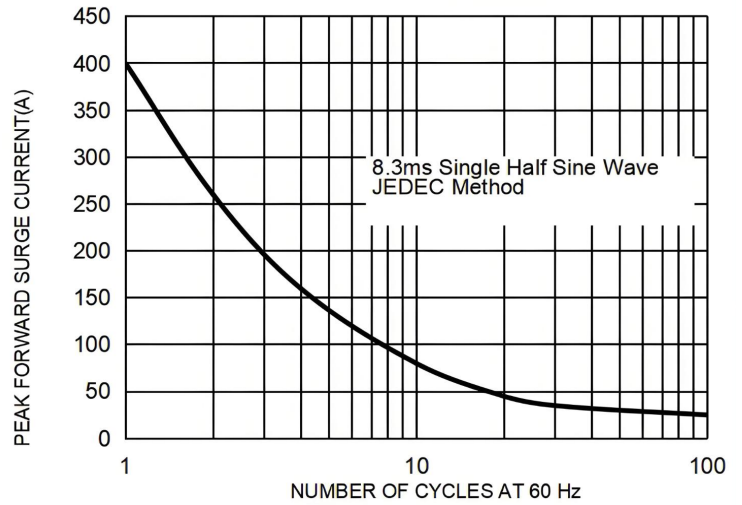


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

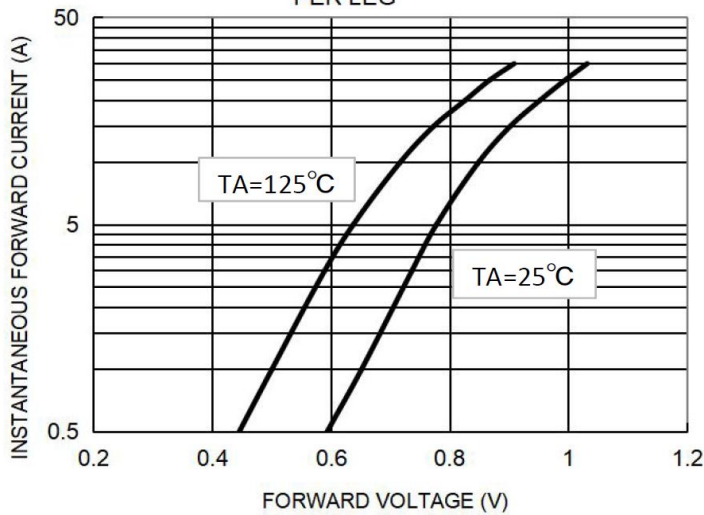
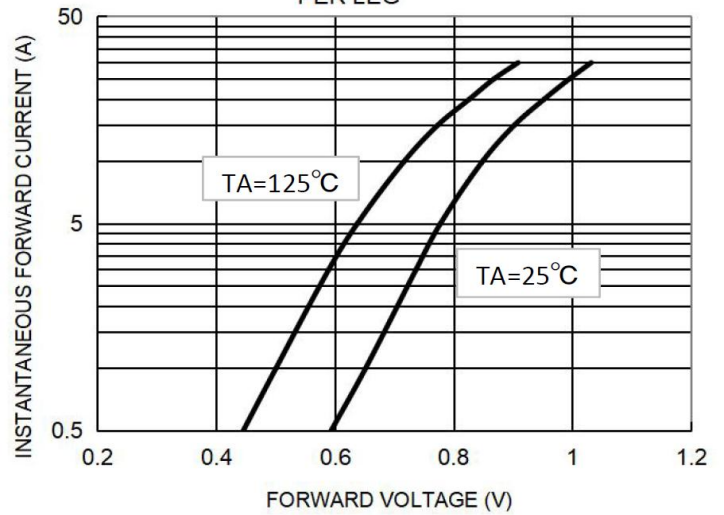
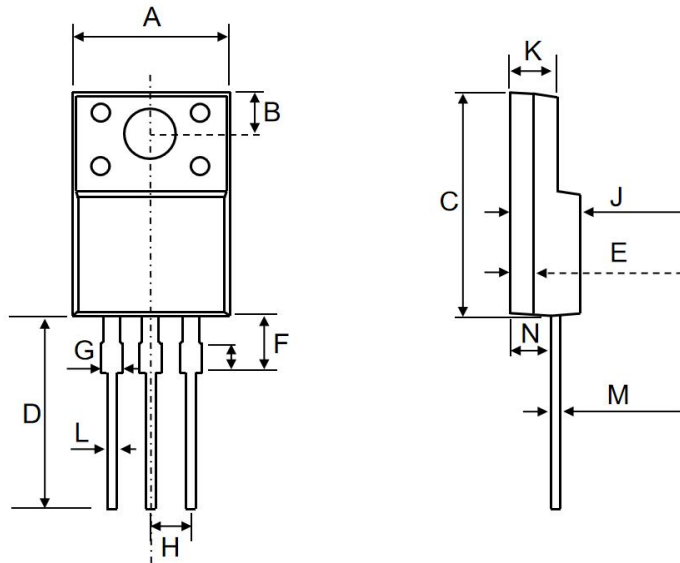


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG



TO-220F Package Outline Dimensions



DIM.	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.390	0.409	9.90	10.40
B	0.098	0.138	2.50	3.50
C	0.575	0.630	14.60	16.00
D	0.502	0.549	12.75	13.95
E	0.020	0.059	0.50	1.50
F	0.106	0.138	2.70	3.50
G	0.049	0.063	1.25	1.60
H	0.100 (typ.)		2.54 (typ.)	
J	0.169	0.187	4.30	4.75
K	0.094	0.114	2.40	2.90
L	0.020	0.035	0.50	0.90
M	0.018	0.030	0.45	0.75
N	0.098	0.124	2.50	3.15

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- GreenPower Electronics reserves the right to improve product design function and reliability without notice.
- Any and all semiconductor products have certain probability to fail or malfunction, which may result in personal injury, death or property damage. Customer are solely responsible for providing adequate safe measures when design their systems.
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