



Micro Commercial Components

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# MBR30150PT

## 30 Amp Power Schottky Rectifier 150 Volts

### Features

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- High Junction Temperature Capability
- Low forward voltage, high current capability
- High surge capacity
- Low power loss, high efficiency
- Marking : type number

### Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C

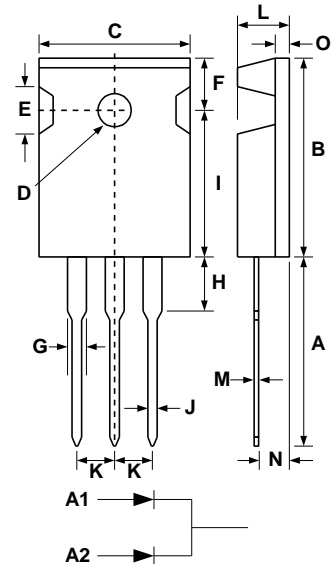
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR30150PT	150V	105V	150V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	35 A	$T_C = 125^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	250A	10ms single or 6ms Rect. pulse
Maximum Instantaneous Forward Voltage	$V_F$	0.85V 0.75V	$I_{FM} = 15A; T_C = 25^\circ\text{C}$ $T_C = 125^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	50 $\mu$ A 10mA	$T_C = 25^\circ\text{C}$ $T_C = 125^\circ\text{C}$
Voltage Rate of Change	dV/dt	10KV/ $\mu$ s	Rated $V_R$
Typical Thermal Resistance, Junction to Case	$R_{th(j-c)}$	2.0°C/W	Per diode

\*Pulse Test: Pulse Width 380 $\mu$ sec, Duty Cycle 2%

### TO-247AD



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.780	.819	19.80	20.80	
B	.807	.846	20.50	21.50	
C	.606	.638	15.40	16.20	
D	.138	.150	3.50	3.80	
E	.226	.242	5.75	6.15	
F	.209	.224	5.30	5.70	
G	.077	.085	1.95	2.15	
H	.163	.175	4.15	4.45	
I	.591	.622	15.00	15.80	
J	.043	.051	1.10	1.30	
K	.197	.213	5.00	5.40	
L	.189	.205	4.80	5.20	
M	.024	.031	0.60	0.80	
N	.085	.096	2.15	2.45	
O	.079	.091	2.00	2.30	

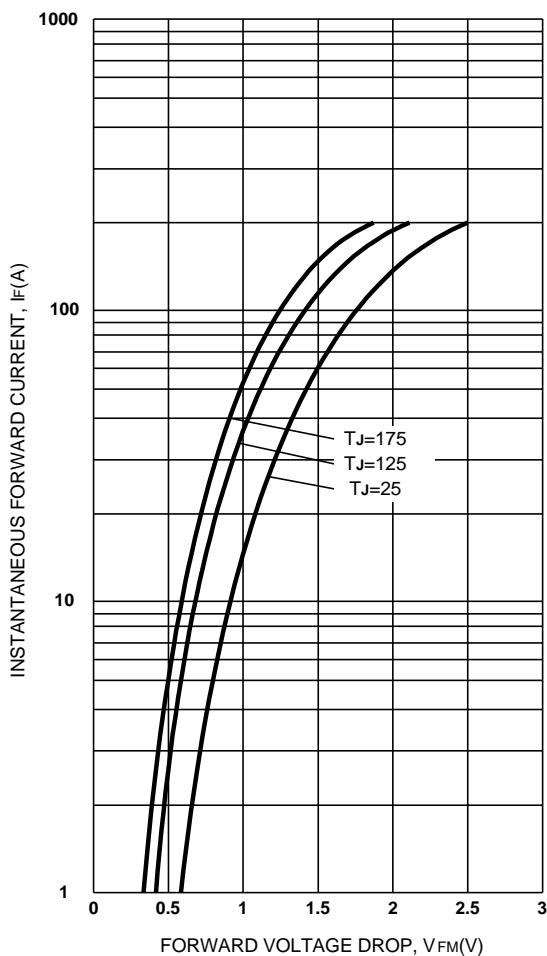


Figure 1. Max. Forward Voltage Drop Characteristics (PerLeg)

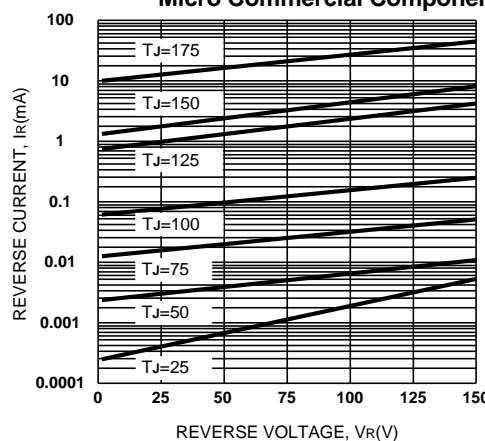


Figure 2. Typical Values Of Reverse Current Vs. Reverse Voltage (PerLeg)

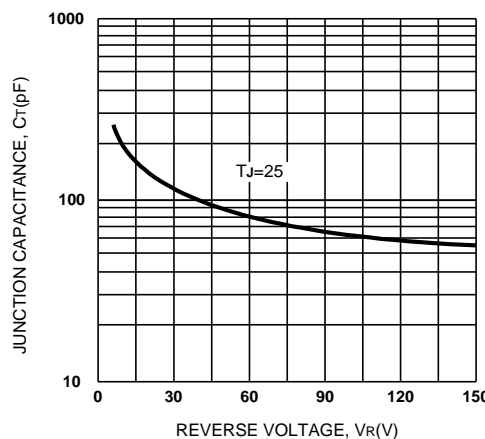


Figure 3. Typical Junction Capacitance Vs. Reverse Voltage (PerLeg)

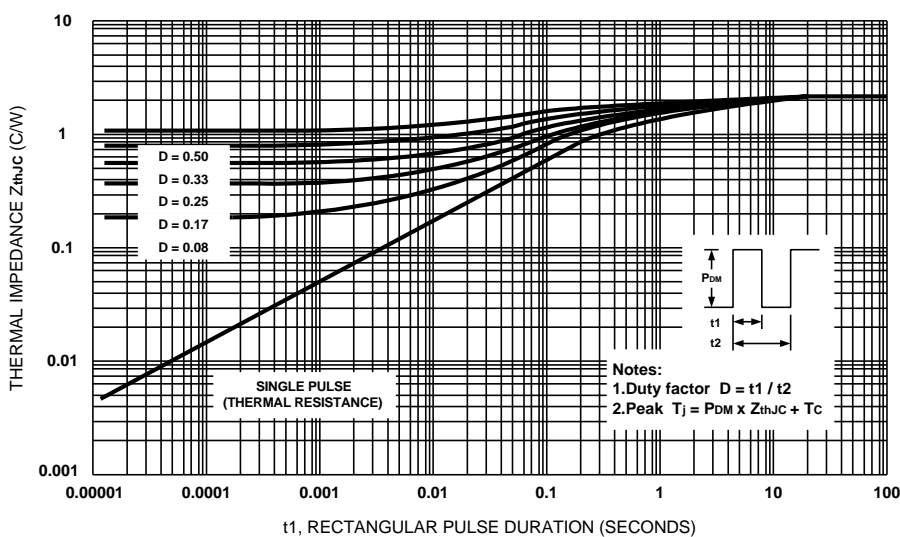


Figure 4. Max. Thermal Impedance  $Z_{thJC}$  Characteristics (PerLeg)

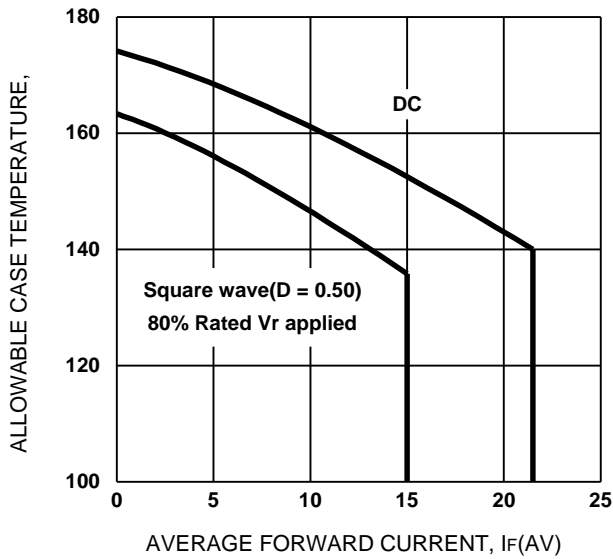


Figure 5. Max. Allowable Case Temperature Vs. Average Forward Current (PerLeg)

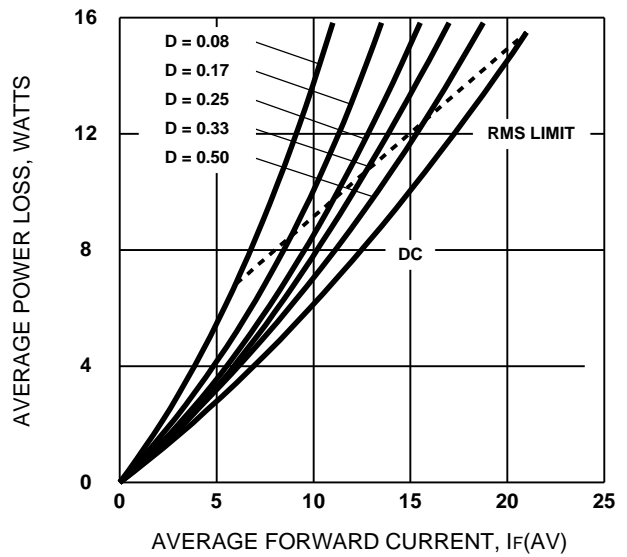


Figure 6. Forward Power Loss Characteristics (PerLeg)

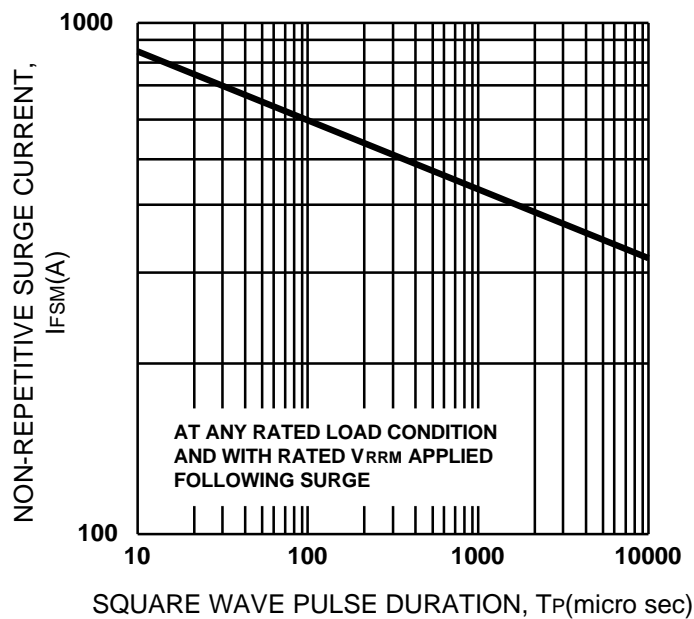


Figure 7. Max. Non-Repetitive Surge Current (PerLeg)



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