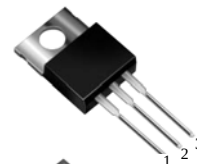
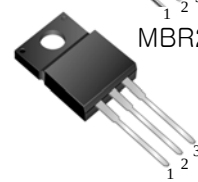
Dual SchottkyBarrierRectifiers
ReverseVoltage 150V Volts ForwardCurrent 20.0Amperes

Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction，positive center tap
- Metal of silicon rectifier，majority carrier conduction
- Low forward voltage，high efficiency
- Guarding for over voltage protection
- For use in low voltage，high frequency inverters，
- Free wheeling，and polarity protection applications



MBR20150CT



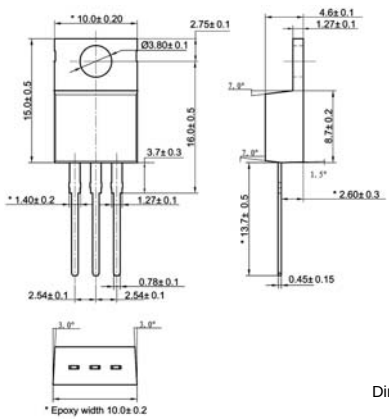
MBRF20150CT

1 ANODE
2 CATHODE
3 ANODE

Mechanical Characteristics

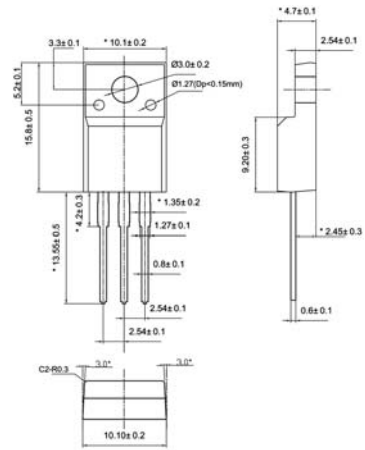
- Case：Epoxy，Molded
- Weight: 1.9grams（approximately）
- Finish：All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes：260°C Max.for10 sec
- Shipped 50 units per plastic tube

TO-220AB



Dimensions in millimeters

TO-220F



Maximum Ratings and Electrical Characteristics

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS(TC=25°C unless otherwise moted)					
PARAMETER	**TEST CONDITIONS**		**SYMBOL**	**MBRF20150CT**	**UNIT**
Maximum repetitive peak reverse voltage			V_{RRM}	150	V
Working peak reverse voltage			V_{RWM}	150	V
Maximum DC blocking voltage			V_{DC}	150	V
Maximum average forward rectified current at Tc=105°C total device per diode			$I_{F(AV)}$	20 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			I_{FSM}	150	A
Peak repetitive reverse current per leg at tp=2.0us ， 1KHz			I_{RRM}	1.0	A
Voltage rate of change（rated VR）			DV/dt	10000	V/us
Operating junction temperature range			T_J	—55 to +150	°C
Storage temperature range			T_{STG}	—55 to +150	°C
Isolation voltage (TO-220F only) from terminal to heatsink t = 1 sec			VAC	1500	V
Maximum instantaneous forward voltage per leg	IF=10A IF=10A	Tc=25°C Tc=125℃	VF	0.92 0.75	V
Maximum reverse current per leg at working peak Reverse voltage		Tc=25°C Tc=100°C	IR	0.2 6	mA

Thermal Characteristics Ta=25°C unless otherwise noted

Symbol	Parameter	Max	Unit
$R_{\theta JC}$	Thermal Resistance，Junction to Case per Leg	4.0	°C /W
$R_{\theta JA}$	Thermal Resistance，Junction to Ambient per Leg	62.5	°C /W

Note：

1. Screw mounting with 4-40 screw，where washer diameteris≤4.9mm(0.19〃)
2. Pulse test:300us pulse width,1% duty cycle

Rating and Characteristic Curves ectrical Characteristics

(TA = 25 °C unless otherwise noted)

Fig. 1: Average forward power dissipation versus average forward current (per diode).

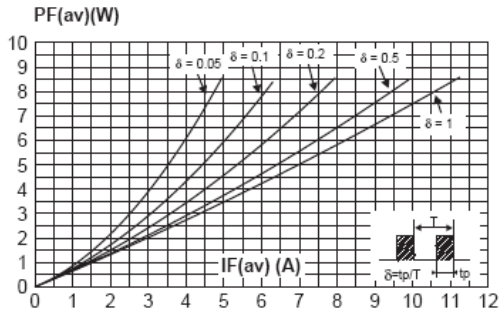


Fig. 2: Average forward current versus ambient temperature (δ = 0.5, per diode).

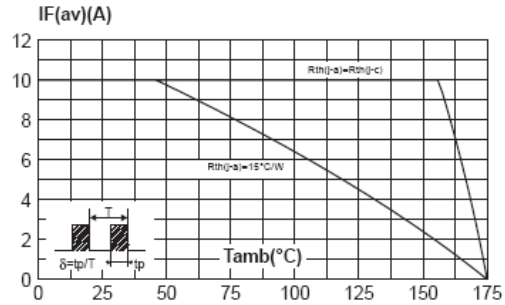


Fig. 3: Non repetitive surge peak forward current versus overload duration (maximum values, per diode).

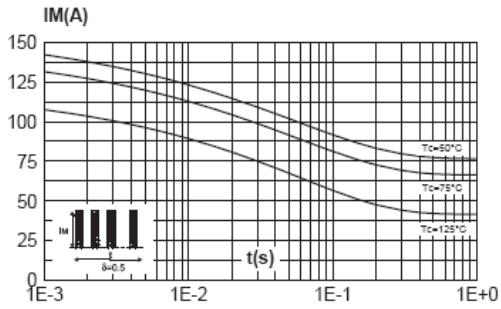


Fig. 4: Relative variation of thermal impedance junction to case versus pulse duration (per diode).

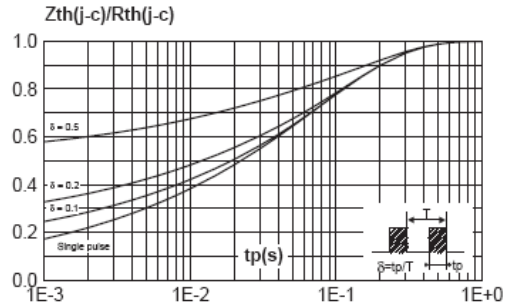


Fig. 5: Reverse leakage current versus reverse voltage applied (typical values, per diode).

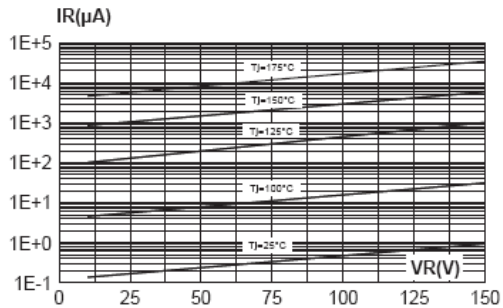


Fig. 6: Junction capacitance versus reverse voltage applied (typical values, per diode).