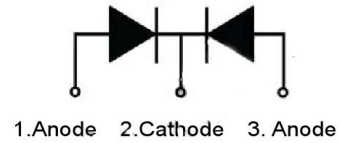
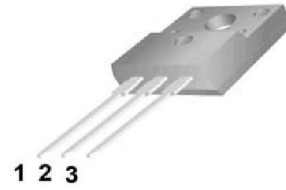




TO-220F



MBRF1040CT-MBRF10200CT

Features:

- Low power loss,high efficiency.
High surge capacity
- For use in low voltage,high frequency inverters,
free wheeling,and polarity protection applications.
- Metal silicon junction,majority carrier conduction.
- High current Capability,low forward voltage drop.
- Guard ring for over voltage protection.

Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	MBRF 1040 CT	MBRF 1045 CT	MBRF 1050 CT	MBRF 1060 CT	MBRF 1080 CT	MBRF 1090 CT	MBRF 10100 CT	MBRF 10150 CT	MBRF 10200 CT	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	31.5	35	42	56	63	70	105	140	
Maximum DC Blocking Voltage	$V_{R(DC)}$	40	45	50	60	80	90	100	150	200	
Maximum Average Forward Current	$I_{F(AV)}$	10									A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150									
Maximum Forward Voltage at 5A per leg	V_F	0.65		0.72		0.82		0.92		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_J=25^\circ\text{C}$	0.1									mA
	$T_J=125^\circ\text{C}$	20									
Maximum Operating Junction Temperature	T_J	150		175						°C	
Storage Temperature	T_{stg}	-55--150		-65--175							
Typical Thermal Resistance	$R_{\theta JC}$	1.4									°C/W

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

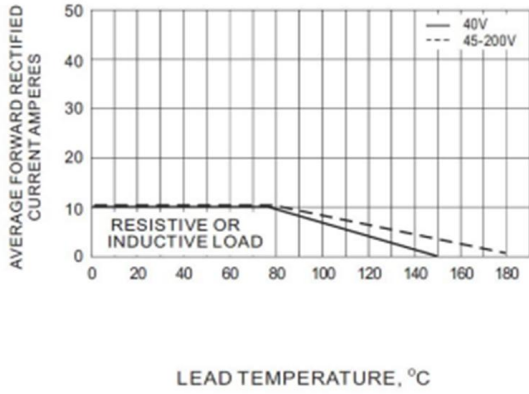


Fig.1 FORWARD CURRENT ERATING CURVE

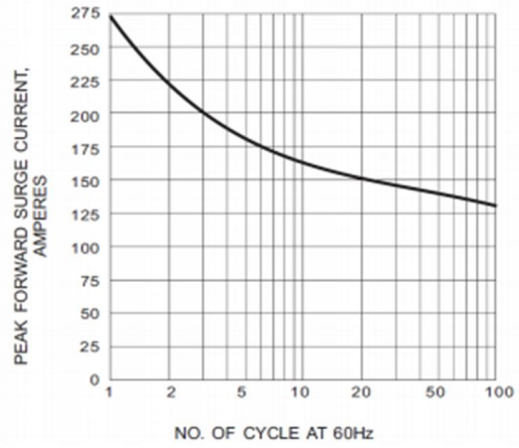


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

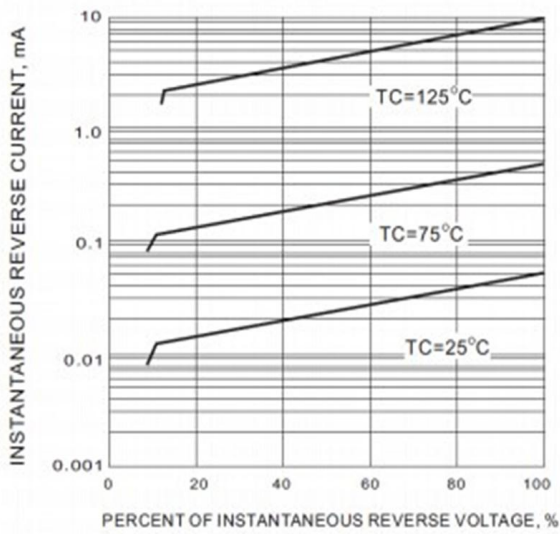


Fig.3 TYPICAL REVERSE CHARACTERISTIC

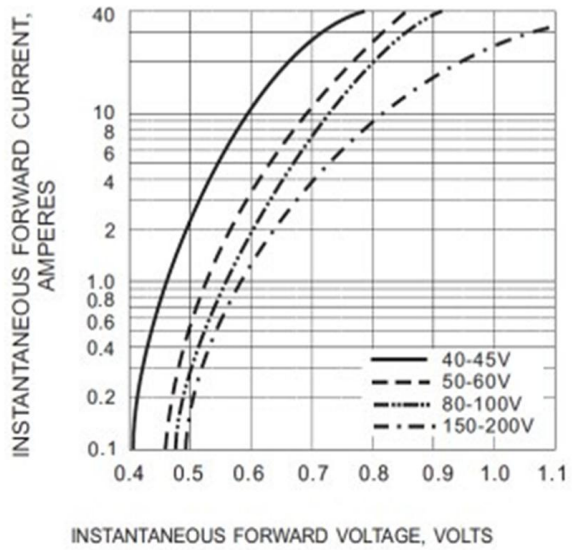


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC