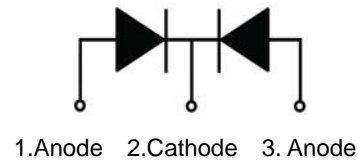
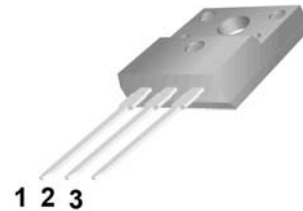


MBRF2040CT-MBRF20200CT
Features:

- 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.


TO-220F

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

PARAMETER	Symbol	MBRF 2040 CT	MBRF 2045 CT	MBRF 2050 CT	MBRF 2060 CT	MBRF 2080 CT	MBRF 2090 CT	MBRF 20100 CT	MBRF 20150 CT	MBRF 20200 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	V
Maximum DC Blocking Voltage	$V_{R(DC)}$	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current	$I_{F(AV)}$	20									A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200									A
Maximum Forward Voltage at 10A per leg	V_F	0.65		0.72		0.85		0.95			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_j=25^{\circ}C$	0.1									mA
	$T_j=125^{\circ}C$	20									mA
Maximum Operating Junction Temperature	T_j	150				175					°C
Storage Temperature	T_{stg}	-55~+ 150				-65~+175					°C
Typical Thermal Resistance	$R_{\theta JC}$	1.4									°C/W

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

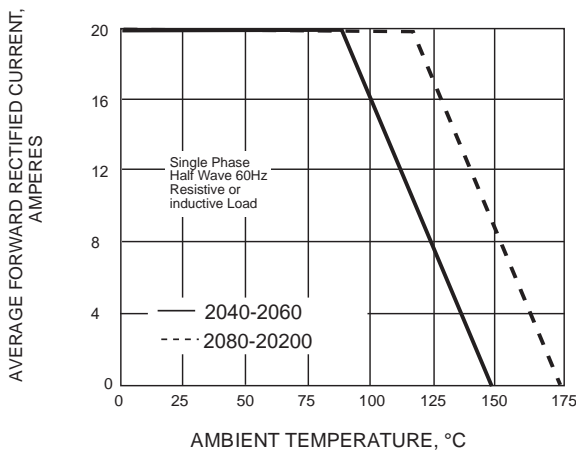


Fig.1 FORWARD CURRENT ERATING CURVE

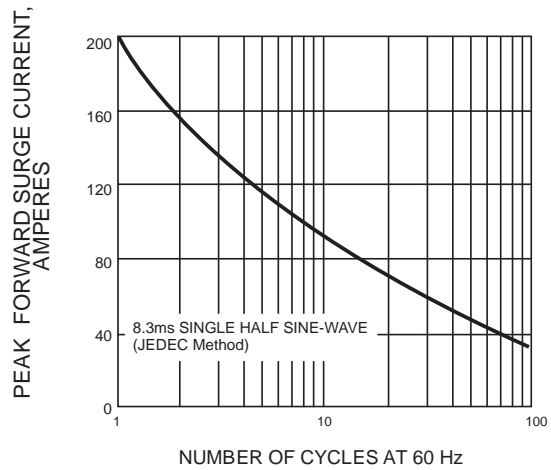


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

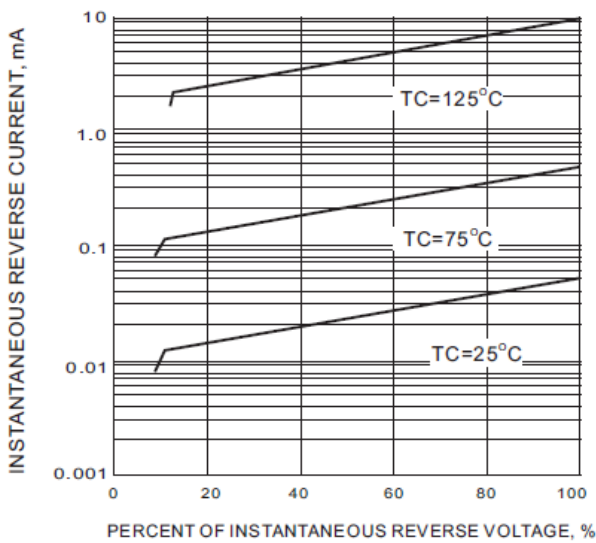


Fig.3 TYPICAL REVERSE CHARACTERISTIC

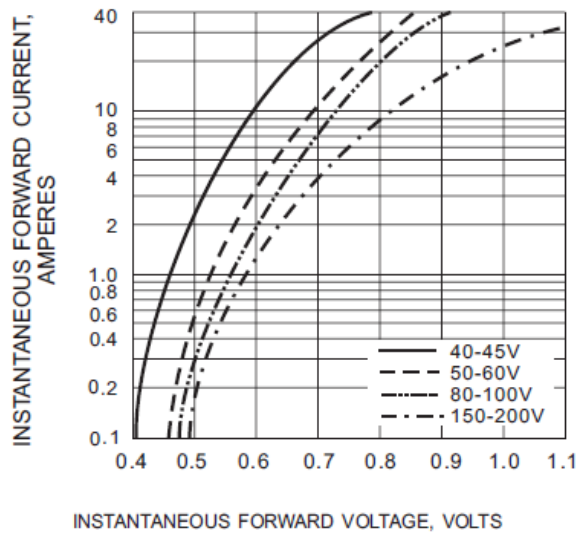
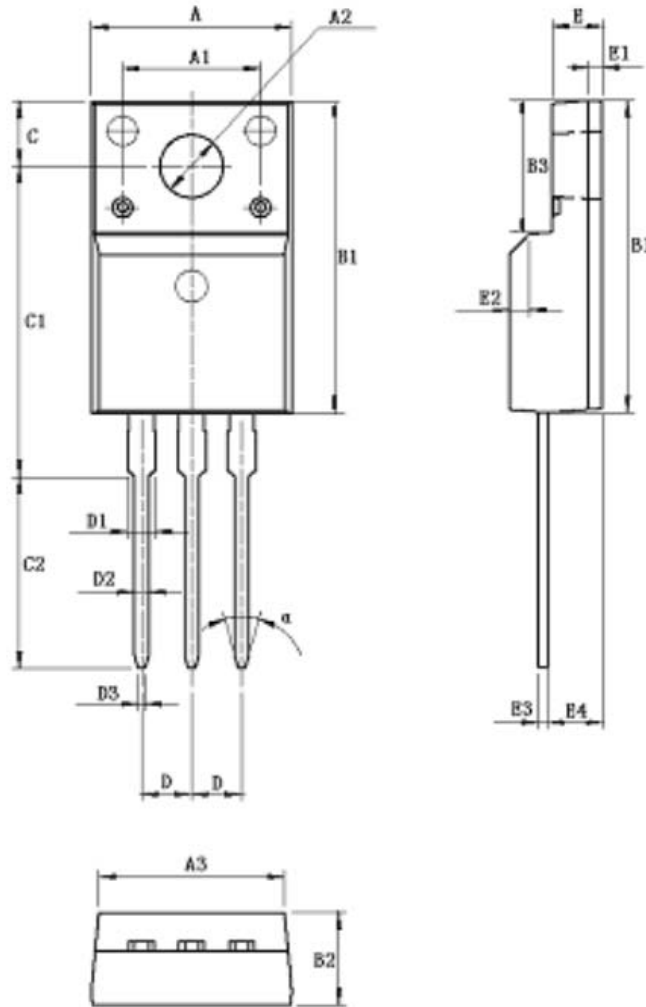


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Package Dimension
TO-220F

Units: mm



Symbol	Min	Max	Symbol	Min	Max
A	9.96	10.36	D	2.54	
A1	7.00		D1	1.15	1.35
A2	3.08	3.28	D2	0.70	0.90
A3	9.25	9.65	D3	0.28	0.48
B1	15.70	16.10	E	2.34	2.74
B2	4.50	4.90	E1	0.70	
B3	6.20	6.80	E2	1.0×45°	
C	3.20	3.40	E3	0.36	0.65
C1	15.20	16.00	E4	2.55	2.95
C2	9.75	10.15	a(度)	30°	