

## 20A SCHOTTKY BARRIER RECTIFIER

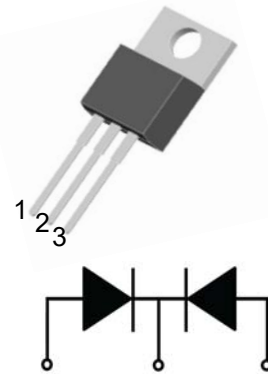
MBR20100SCT metal head

MBRF20100SCT plastic head

**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-220



1.Anode 2.Cathode 3. Anode

**Marking:**

MBR20100SCT, earlier MBR20100CT

MBRF20100SCT, earlier MBRF20100CT

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

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS Voltage	$V_{RMS}$	70	V
Maximum DC Blocking Voltage	$V_{R(DC)}$	100	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)	$I_{FSM}$	180	A
Maximum Forward Voltage @10A	$V_F$	0.85	V
Maximum DC Reverse Current	$T_j=25^\circ\text{C}$	0.1	mA
	$T_j=125^\circ\text{C}$	20	mA
Maximum Operating Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-40~+150	°C

**Typical Characteristics**
**RATING AND CHARACTERISTIC CURVES**

FIG. 1- FORWARD CURRENT DERATING CURVE

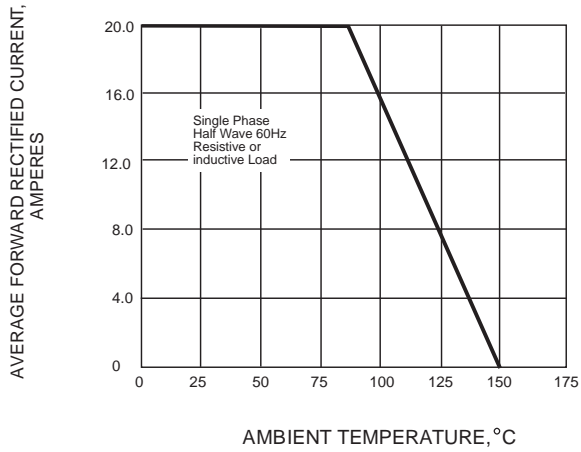


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

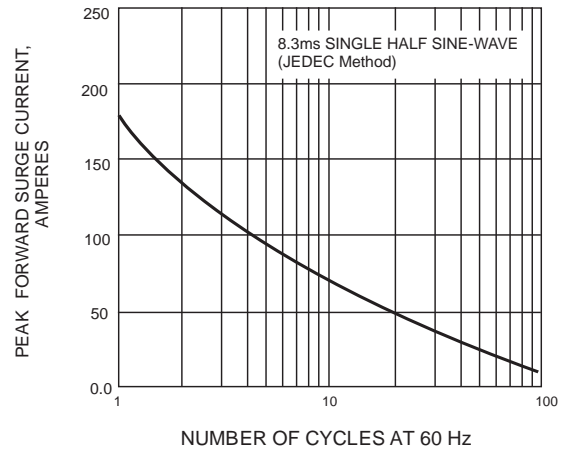


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

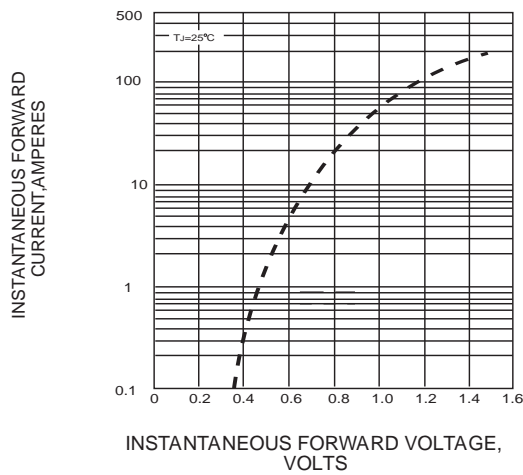
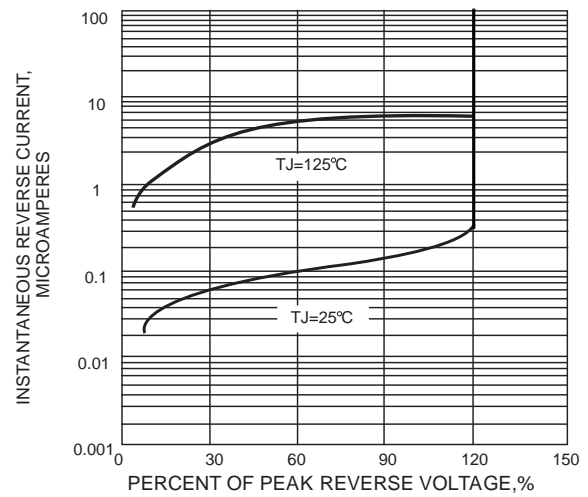
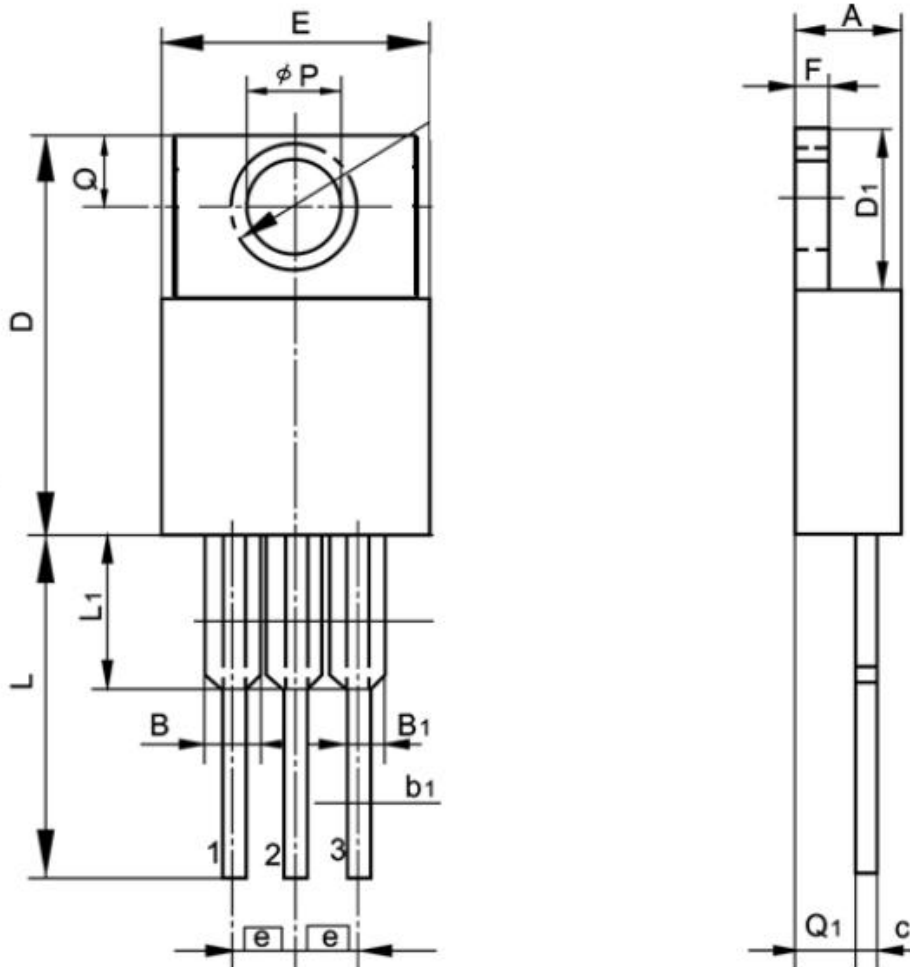


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Package Dimension
**TO-220**


UNIT: mm

SYMBOL	min	nom	max	SYMBOL	min	nom	max
A	4.00		4.80	E	9.70		10.70
B	1.15		1.45	e		2.54	
B1	0.90		1.40	F	1.10		1.40
b1	0.65		0.95	L	12.50		14.50
c	0.30		0.50	L1	2.90	3.40	3.90
D	14.40		16.40	Q	2.50		3.10
D1	5.90		6.90	Q1	2.00		3.00
				$\phi P$	3.60		4.00