

DESCRIPTION

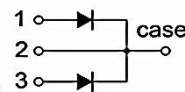
The MBR20200CT meet the ROHS and Green Product requirement with full function reliability approved.

FEATURE

- *Schottky Barrier Chip
- *Guard Ring Die Construction for Transient Protection
- *Low Power Loss,High Efficiency
- *High Surge Capability
- *High Current Capability and Low Forward Voltage Drop
- *For Use in Low Voltage, High Frequency Inverters,Free Wheeling, and Polarity Protection Applications



- 1. ANODE
- 2. CATHODE
- 3. ANODE



ABSOLUTE MAXIMUM RATINGS(TA=25°C, unless otherwise specified.)

SYMBOL	PARAMETER	VALUE	UNIT
VRRM	Peak repetitive reverse voltage	200	V
VRWM	Working peak reverse voltage	200	V
VR	DC blocking voltage	200	V
VR(RMS)	RMS reverse voltage	140	V
IO	Average rectified output current	20 (10*2)	A
IFSM	Non-Repetitive peak forward surge current(8.3ms half sine wave)	150*2	A
Tj	Junction temperature	175	°C
Tstg	Storage temperature	-55 ~ +150	°C
Cj (Ctot)	Typical total capacitance VR=5V,f=1MHz	500	pF
RθJA	Thermal Resistance from Junction to Ambient	58	°C/W
RθJC	Thermal Resistance From Junction To Case	3	°C/W

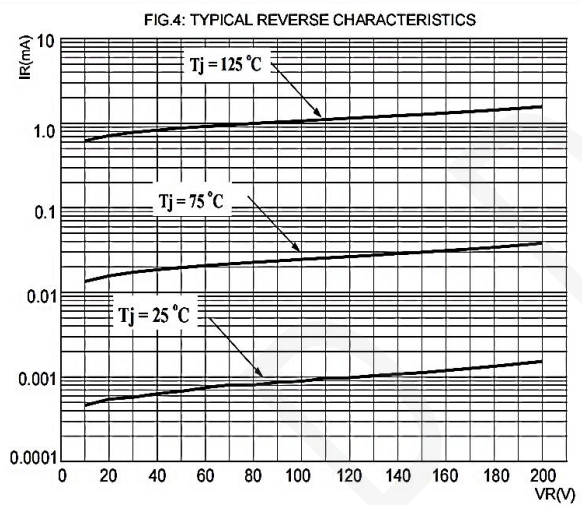
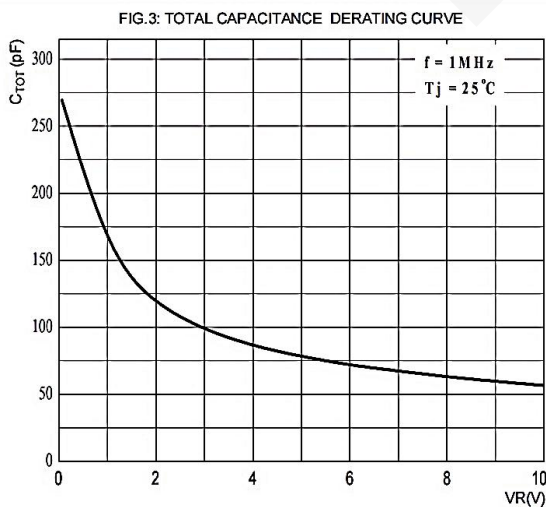
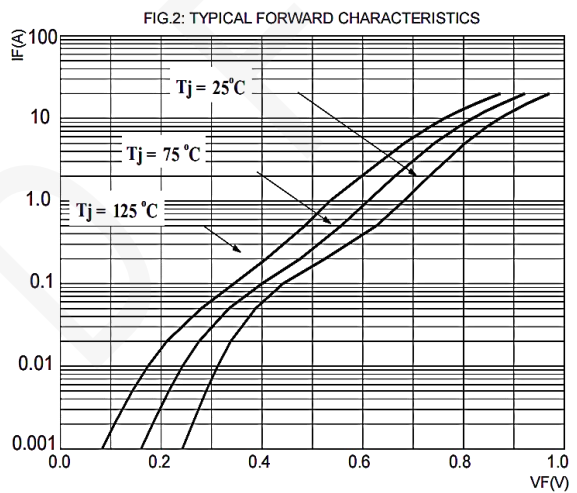
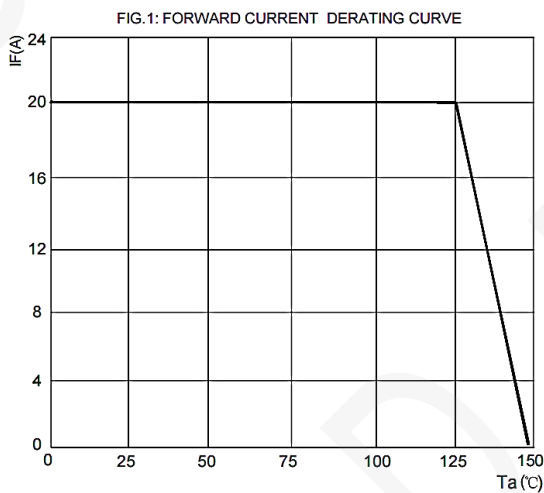
Notes: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

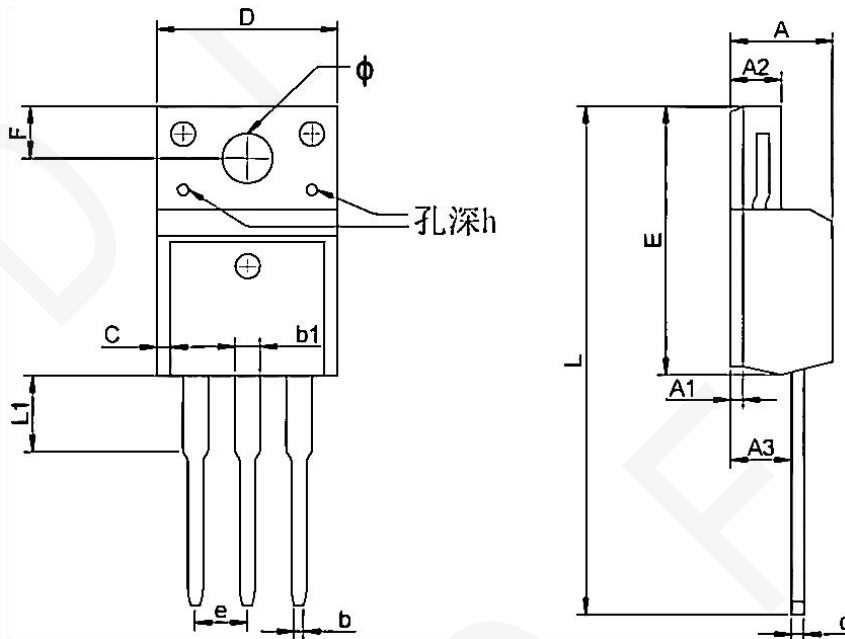
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse voltage	V _(BR)	I _R =0.1mA	200			V
Reverse current	I _R	V _R =200V	T _J =25°C	0.5	3	uA
			T _J =125°C	2.0		mA
Forward voltage	V _F	I _F =5A	T _J =25°C	0.78		V
			T _J =125°C	0.66		V
		I _F =10A	T _J =25°C	0.86	0.92	V
			T _J =125°C	0.74		V

Pulse test: pulse width ≤300μs, duty cycle≤ 2.0%.

■ TYPICAL CHARACTERISTICS



TO-220F PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max	Min	Max
A	4.300	4.750	0.169	0.185
A1	1.830 REF		0.072 REF	
A2	2.300	2.850	0.090	0.112
A3	2.500	2.900	0.098	0.114
b	0.400	0.420	0.016	0.016
b1	1.220	1.280	0.048	0.050
C	0.690	0.720	0.027	0.028
c	0.490	0.510	0.019	0.020
D	9.960	10.200	0.392	0.400
E	15.000	15.950	0.588	0.625
e	2.574 TYP		0.101 TYP	
F	3.470 REF		0.136 REF	
y	3.200 REF		0.125 REF	
h	0.000	0.300	0.000	0.012
L	28.780	28.900	1.128	1.133
L1	2.990	3.100	0.117	0.122