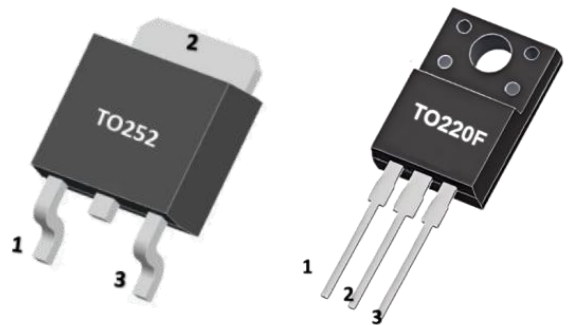


DESCRIPTION

The MBR30200CS/CT is a 30A Schottky barrier rectifier, it uses our advanced technology to provide the customers with high surge capability, high efficiency, high current capability, low power loss and low forward voltage drop, etc.

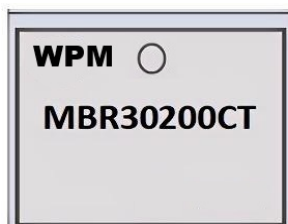
The MBR30200CS/CT is suitable for free wheeling and polarity protection, etc.



FEATURE

- *Schottky Barrier Chip
- *Guard Ring Die Construction for Transient Protection
- *High Current Capability and Low Forward Voltage Drop

MARKING

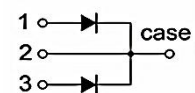


WPM : LOGO

MBR30200CT=Device Code (TO-220F)

MBR30200CS=Device Code (TO-252)

1. ANODE
2. CATHODE
3. ANODE



ABSOLUTE MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$, unless otherwise specified.)

SYMBOL	PARAMETER		VALUE	UNIT
VRRM	Peak repetitive reverse voltage		200	V
VRWM	Working peak reverse voltage			V
VR	DC blocking voltage			V
VR(RMS)	RMS reverse voltage		140	V
Io	Average rectified output current		30（15*2）	A
IFSM	Non-Repetitive peak forward surge current(8.3ms half sine wave)		200*2	A
Tj	Junction temperature		175	℃
Tstg	Storage temperature		-55~+150	℃
RθJA	Thermal Resistance fromJunction to Ambient	TO-252	62	℃/W
		TO-220F	62.5	
RθJC	Thermal Resistance From Junction To Case	TO-252	4.5	℃/W
		TO-220F	3	

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 ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Voltage	$V_{(BR)R}$	$I_R=0.10\text{mA}$	200			V
Reverse current	I_R	$V_R=200\text{V}$	$T_j=25^\circ\text{C}$	5.0	100	μA
			$T_j=125^\circ\text{C}$	5.0		mA
Forward voltage	V_F	$I_F=10\text{A}$	$T_j=25^\circ\text{C}$	0.832	0.88	V
			$T_j=125^\circ\text{C}$	0.71		V
		$I_F=15\text{A}$	$T_j=25^\circ\text{C}$	0.87	0.95	V
			$T_j=125^\circ\text{C}$	0.75		V

Notes: 1. Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2.0\%$.

TYPICAL CHARACTERISTICS

FIG.1: FORWARD CURRENT DERATING CURVE

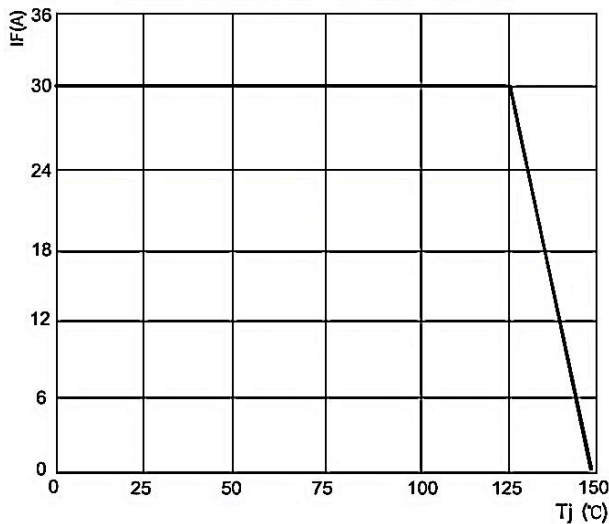


FIG.2: TYPICAL FORWARD CHARACTERISTICS

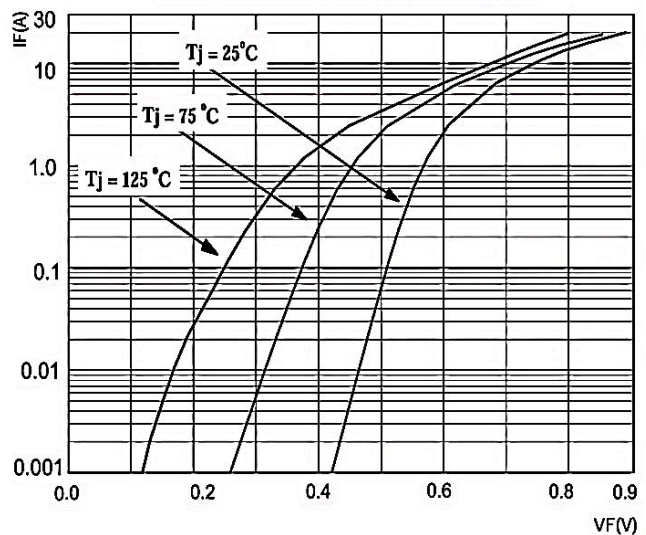


FIG.3: TOTAL CAPACITANCE DERATING CURVE

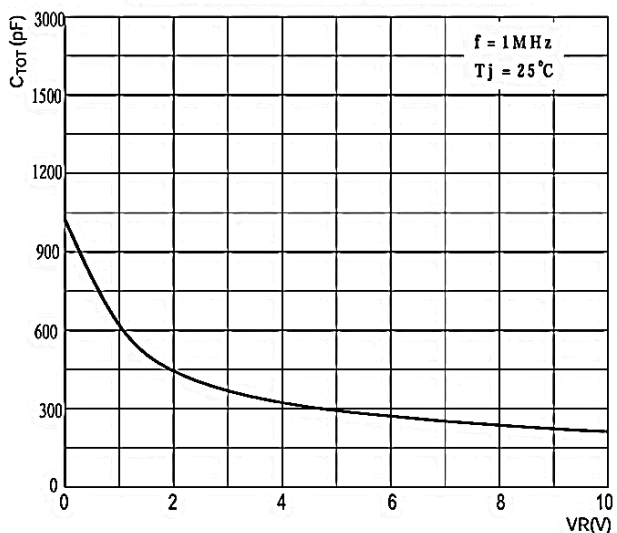
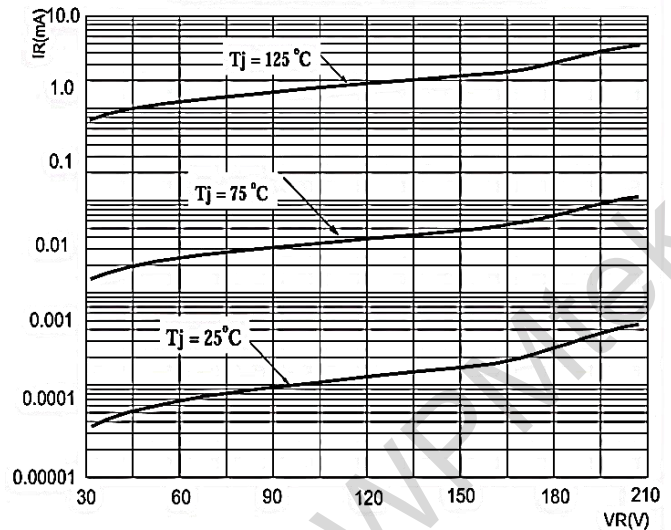
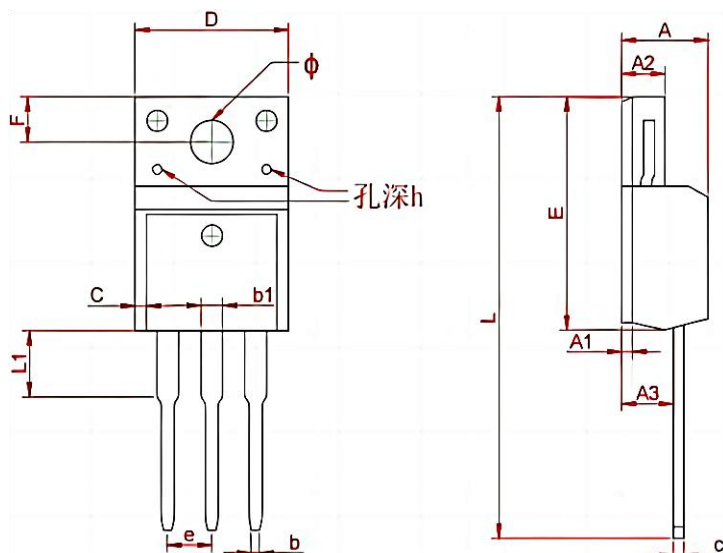


FIG.4: TYPICAL REVERSE CHARACTERISTICS



TO - 220F Package Outline Dimensions

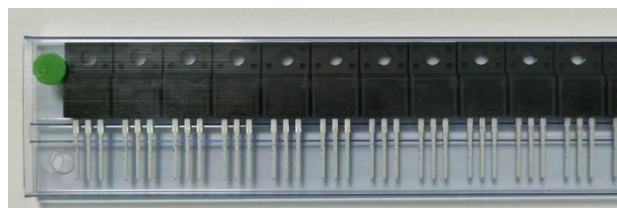


Symbol	Dimensions In Millimeters	
	Min	Max
A	4.300	4.750
A1	0.7 REF	
A2	2.300	2.850
A3	2.500	2.900
b	0.380	0.420
b1	1.220	1.280
C	1.08	1.200
c	0.480	0.520
D	10.15	10.450
E	15.700	15.950
e	2.574 TYP	
F	3.470 REF	
y	3.200 REF	
h	0.000	0.800
L	28.780	28.900
L1	2.990	3.100

TO - 220F Packing Information



50PCS



20 Tube



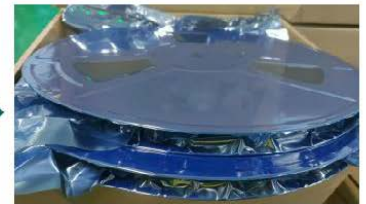
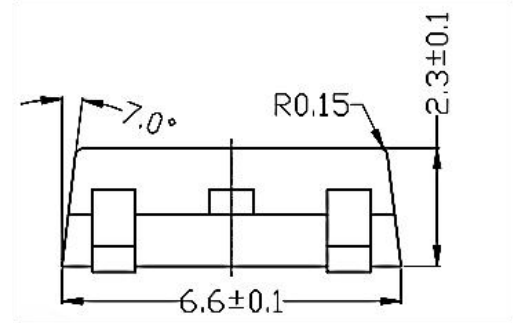
5 Inner
Box



Outer Box

Inner Box

Package version	Tube dimensions LxWxH (mm)	Per Tube (pcs)	Tube per box	Inner box dimensions LxWxH (mm)	PCS/ Inner box	Outer box dimensions LxWxH(mm)	PCS/ Outer box
TO-220F	530*32*7	50	20	580*155*50	1000	602*277*188	5000

A brown cardboard box, likely for shipping, with two shipping labels. One label is on the front face and the other is on the side face. Both labels contain a barcode and some text, including what appears to be a date and time.

CAUTION Electronic Sensitive Device
(See Chapter 102 Handling Procedures)

Inner box

Package version	Reel dimensions $\Phi \times H$ (mm)	Per Reel (pcs)	Reels per box	Inner box dimensions $L \times W \times H$ (mm)	Outer box (pcs)	Outer box dimensions $L \times W \times H$ (mm)
TO-252	$\Phi 330 \times 20$	2500	2	360*340*50	25000	375*375*280

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