

MBR(D/F)2065CT

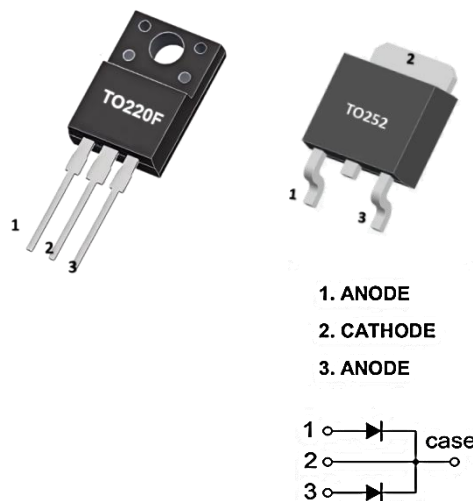
SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

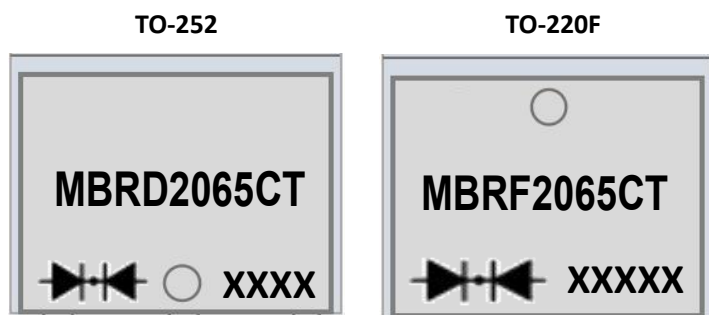
The MBR(D/F)2065CT meet the ROHS and Green Product requirement with full function reliability approved.

FEATURE

- * 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 Capacity,Low Forward Voltage Drop.
- * Guard Ring for Over Voltage Protection.



MARKING(The image is for reference only. Please take the actual product as the standard)



MBR(D/F)2065CT=Device Code
XXXX(X)=Date Code
Solid Dot=Green molding compound

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

SYMBOL	PARAMETER		VALUE	UNIT
VRRM	Peak repetitive reverse voltage		65	V
VRWM	Working peak reverse voltage		65	V
VR	DC blocking voltage		65	V
VR(RMS)	RMS reverse voltage		45.5	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		150	°C
Tstg	Storage temperature		-55 ~ +150	°C
RθJA	Thermal Resistance from Junction to Ambient	TO-252	100	°C/W
		TO-220F	58	
RθJC	Thermal Resistance From Junction To Case	TO-252	5	°C/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.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse voltage	V(BR)	I R=0.2mA	65			V
Reverse current	I R	V R=65V	Tj =25°C		50	uA
			Tj =125°C	5.0		mA
Forward voltage	V F	I F=5A	Tj =25°C		0.7	V
			Tj =125°C	0.54		V
		I F=10A	Tj =25°C		0.85	V
			Tj =125°C	0.62		V

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

TYPICAL CHARACTERISTICS

FIG.1: FORWARD CURRENT DERATING CURVE

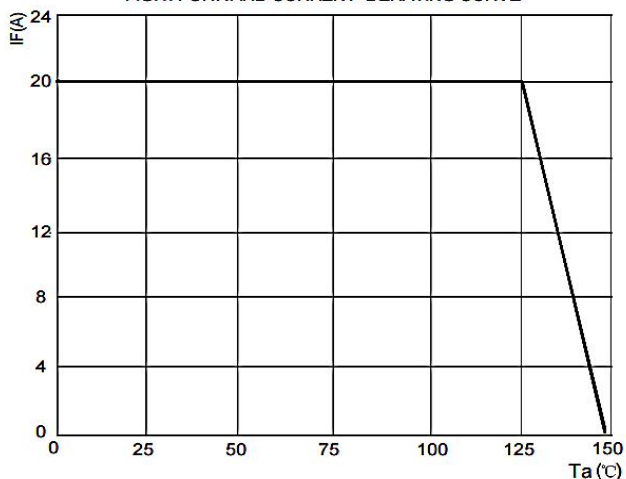


FIG.2: TYPICAL FORWARD CHARACTERISTICS

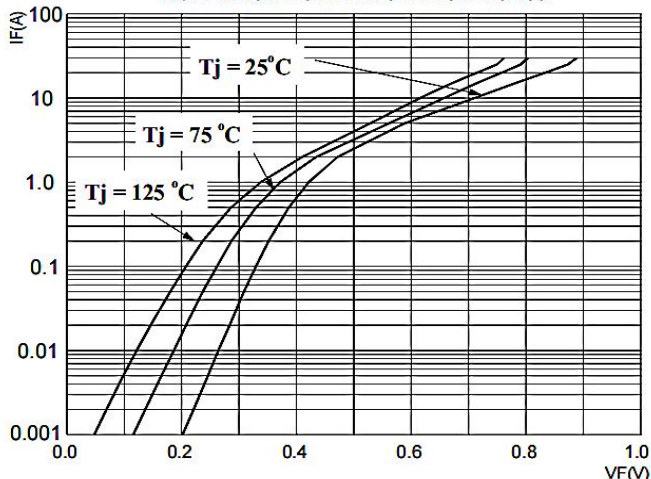


FIG.3: TOTAL CAPACITANCE DERATING CURVE

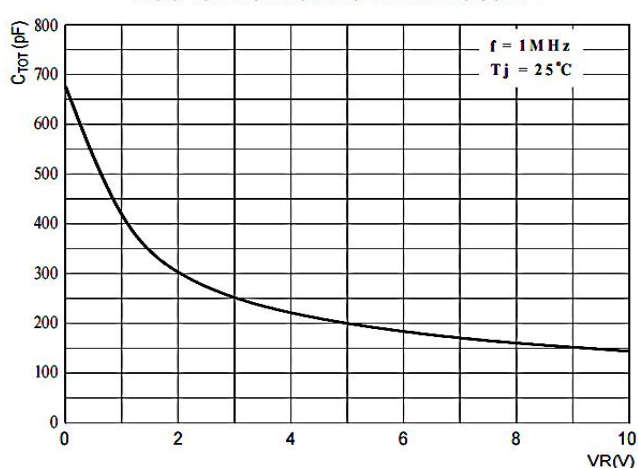
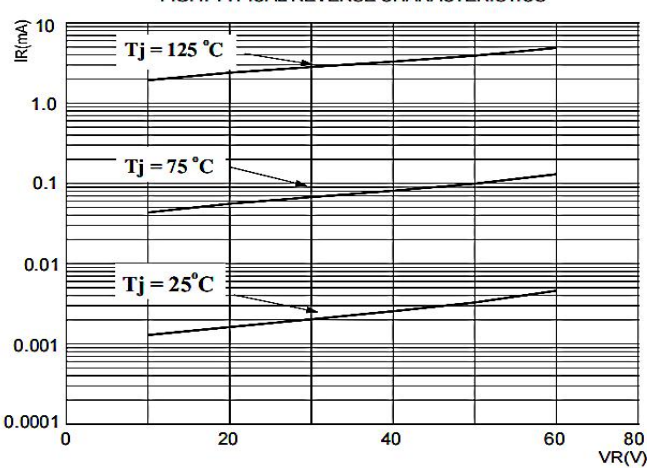
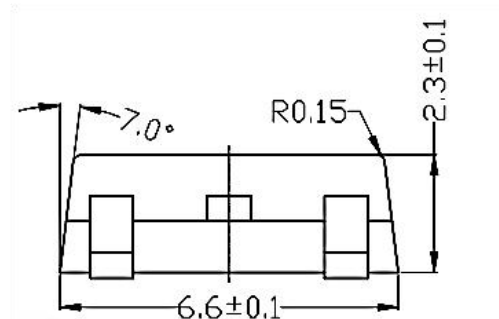
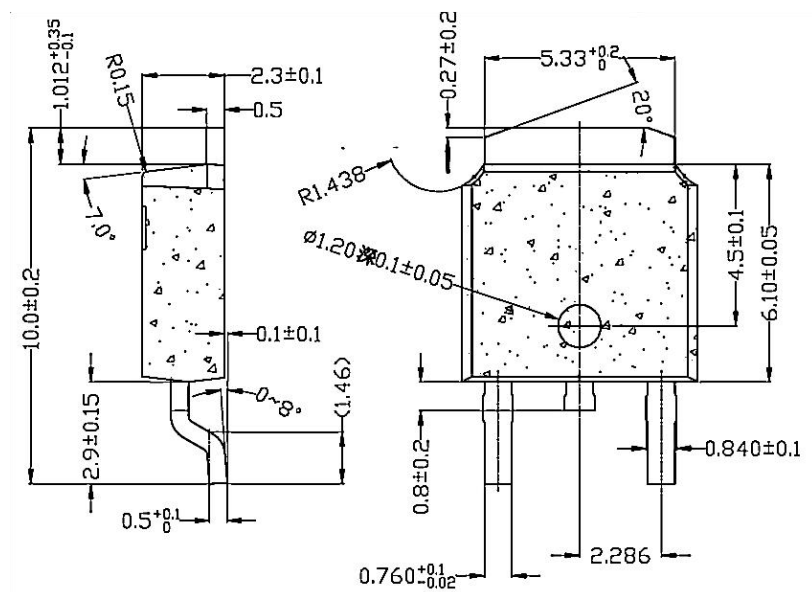


FIG.4: TYPICAL REVERSE CHARACTERISTICS



TO - 252 Package Outline Dimensions



TO - 252 Packing Information

Package version	Reel dimensions Φ×H (mm)	Per Reel (pcs)	Reels per box	Inner box dimensions L×W×H(mm)	Outer box (pcs)	Outer box dimensions L×W×H (mm)
T0-252	Φ 330*20	2500	2	360*340*50	25000	375*375*280



SCHOTTKY BARRIER RECTIFIER

Technical drawing of a 4-pin DIN connector, showing front and side views with dimension labels.

Front View Dimensions:

- D : Overall width of the connector body.
- ϕ : Diameter of the central mounting hole.
- E : Distance from the top edge of the connector body to the center of the mounting hole.
- C : Distance from the left edge of the connector body to the center of the first pin.
- b_1 : Distance between the centers of the first and second pins.
- L_1 : Length of the individual pins.
- e : Width of a single pin.
- b : Total width of the four pins.
- 孔深 h** : Pin insertion depth (indicated by a callout).

Side View Dimensions:

- L : Total length of the connector assembly.
- w : Thickness of the main connector body.
- A : Total width of the connector body.
- A_1 : Width of the first pin's contact area.
- A_2 : Width of the second pin's contact area.
- A_3 : Width of the third pin's contact area.
- c : Width of the fourth pin's contact area.

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

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