

MBRA10150GCT & MBRA10150DCT

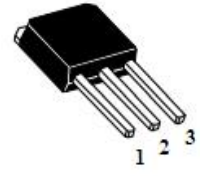
10.0AMPS. SCHOTTKY BARRIER RECTIFIERS

FEATURE

- .High current capability
- .Low forward voltage drop
- .Low power loss, high efficiency
- .High surge capability
- .High temperature soldering guaranteed
260°C /10seconds, 0.25"(6.35mm)from case.



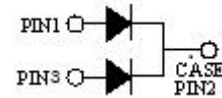
TO-252
MBRA10150GCT



TO-251
MBRA10150DCT

MECHANICAL DATA

- .Case: Molded with UL-94 Class V-0 recognized
Flame Retardant Epoxy
- .Mounting position: any



Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

MAXIMUM RATINGS (T_C=25°C unless otherwise noted)

Parameter	Symbol	MBRA10150GCT & MBRA10150DCT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS Voltage	V_{RMS}	105	V
Maximum DC blocking Voltage	V_{DC}	150	V
Maximum Average Forward Rectified Current <i>Per Leg</i> at T _C =100°C <i>Total device</i>	$I_{F(AV)}$	5.0 10.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) <i>Per Leg</i>	I_{FSM}	125.0	A
Typical Junction Capacitance (Note 1)	C_J	70	pF
Operation Junction Temperature and Storage Temperature	T_J, T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS - (*Per Leg*) (T_C=25°C unless otherwise noted)

Parameter	Symbol	Test conditions	Typ	Max	Units	
Forward voltage drop	V_F	T _J =25°C	I _F =2A	0.74	----	V
			I _F =10A	0.88	0.95	
		T _J =125°C	I _F =2A	0.60	----	
			I _F =10A	0.76	0.85	
Reverse leakage current	I_R	T _J =25°C	V _R =150V	----	0.05	mA
		T _J =125°C	V _R =150V	----	10	

THERMAL CHARACTERISTICS (T_C=25°C unless otherwise noted)

Parameter	Symbol	MBRA10150GCT	MBRA10150DCT	Units
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	6.5	6.5	°C/W

Notes:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Case

RATING AND CHARACTERISTIC CURVES

FIG1-TYPICAL FORWARD CURRENT DERATING CURVE

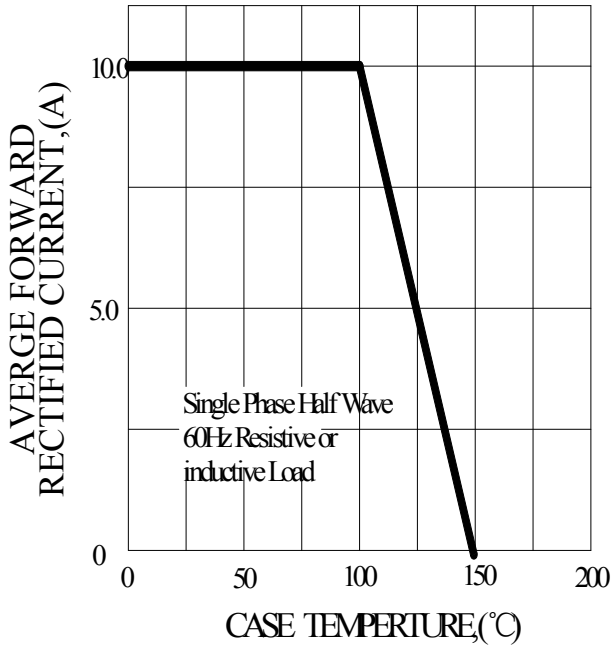


FIG2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

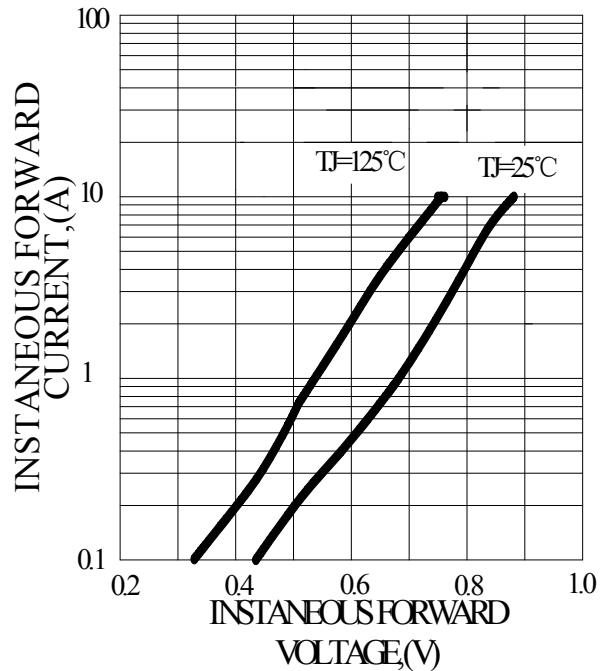


FIG3-MAXIMUM NON-REPEITITIVE FORWARD SURGE CURRENT

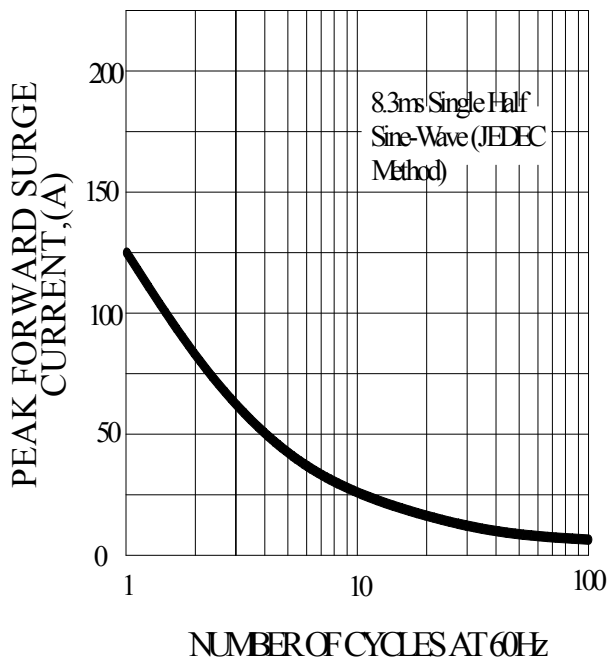
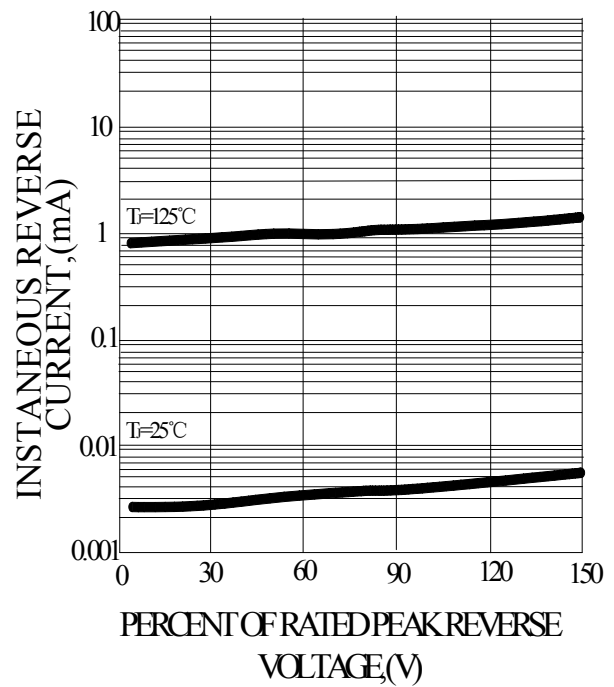
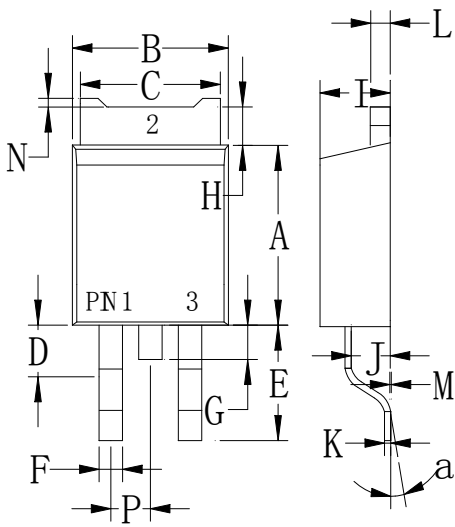


FIG4-TYPICAL REVERSE CHARACTERISTICS



PACKAGE OUTLINE DIMENSIONS

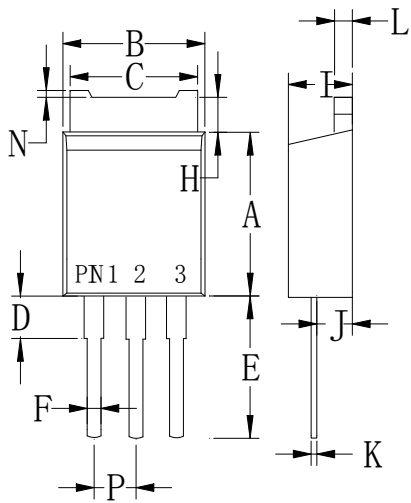
TO-252



TO-252		
Dim	Min	Max
A	.230(5.85)	.246(6.25)
B	.250(6.35)	.264(6.75)
C	.207(5.27)	.218(5.54)
D	.037(0.93)	.045(1.14)
E	.106(2.70)	.138(3.50)
F	.028(0.72)	.033(0.84)
G	.024(0.60)	.041(1.05)
H	.028(0.72)	.043(1.10)
I	.085(2.15)	.096(2.45)
J	.037(0.95)	.047(1.20)
K	.018(0.45)	.026(0.65)
L	.018(0.45)	.024(0.60)
P	.081(2.05)	.094(2.40)
M	.000(0.00)	.006(0.15)
N	--	.008(0.20)
a	0°	10°

Dimensions in inches and (millimeters)

TO-251

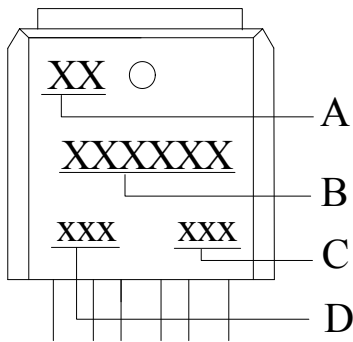


TO-251		
Dim	Min	Max
A	.230(5.85)	.246(6.25)
B	.250(6.35)	.266(6.75)
C	.207(5.27)	.218(5.54)
D	.037(0.93)	.045(1.14)
E	.173(4.40)	.205(5.20)
F	.028(0.72)	.033(0.84)
H	.028(0.70)	.043(1.10)
I	.085(2.15)	.096(2.45)
J	.037(0.95)	.047(1.20)
K	.018(0.45)	.026(0.65)
L	.018(0.45)	.024(0.60)
N	--	.008(0.20)
P	.081(2.05)	.094(2.40)

Dimensions in inches and (millimeters)

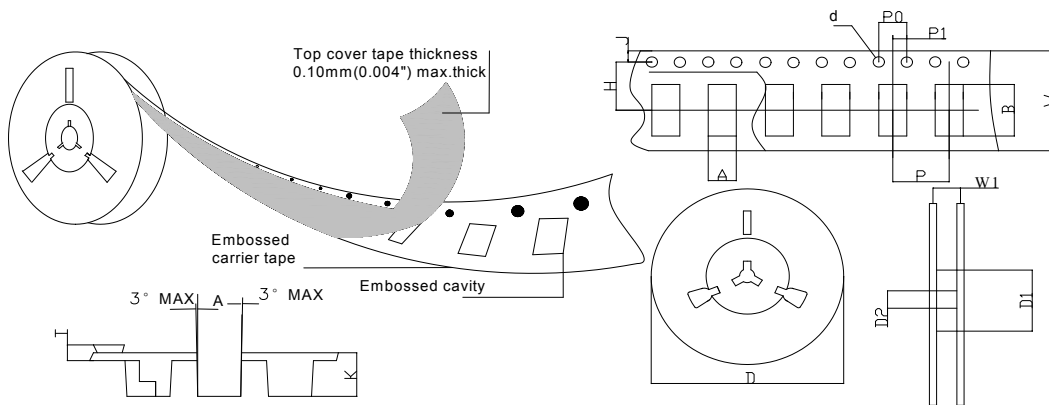
Marking and packaging illustration

1、Marking



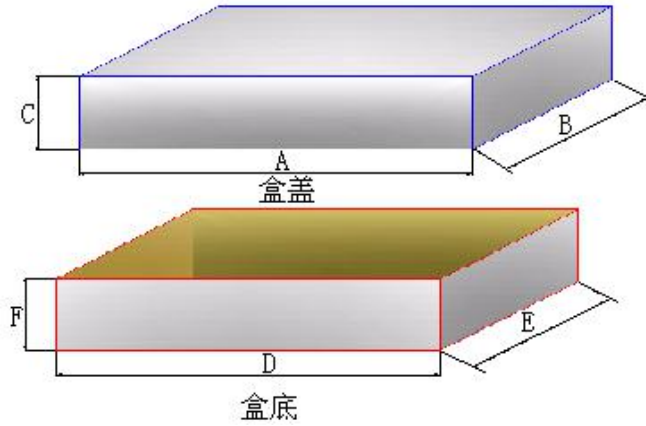
SYMBOL	Explanation
A	Trademark
B	Product Name
C	Date Code
D	Product Information

2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	TO-252	ITEM	SYM BOL	TO-252
Carrier width	A	7.10(0.280)Max	Carrier depth	K	2.79(0.110)Typ
Carrier length	B	10.7(0.421)Max	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	ø1.50(0.059)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	74.0(2.913)Min	Overall tape thickness	T	0.25(0.010)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	16.0(0.630)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	16.5(0.650)Min
Punch hole position	H	7.50(0.295)Typ			

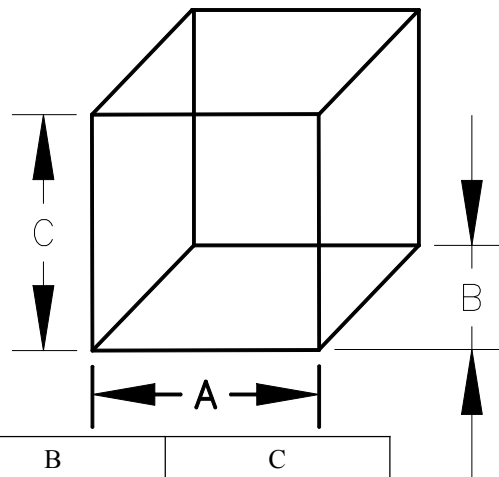
2.1 产品内盒及尺寸：（5000pcs）



类别	A	B	C	D	E	F
TO-252	338	338	48	334	334	46

- 说明：1)、料为瓦楞纸,厚度 1.5mm。
2)、标示尺寸为内部尺，公差为+1/- 2mm。
3)、上下表面要求光滑,不得有污染,有划痕等不良。
4)、盒底和盒盖组合后,要求方正平直。

2.2 产品外箱及尺寸：（35000pcs）



产品名称	包装外形	A	B	C
TO-252	装 7 个卷装内盒	350	350	345

- 说明: 1)、材质：5层瓦楞纸。
2)、颜色：牛皮纸原色。
3)、厚度：5.5mm(min)。
4)、公差：±3mm。
5)、尺寸标注：内部尺寸。