

CURRENT 3.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

TMBF302 THRU TMBF310

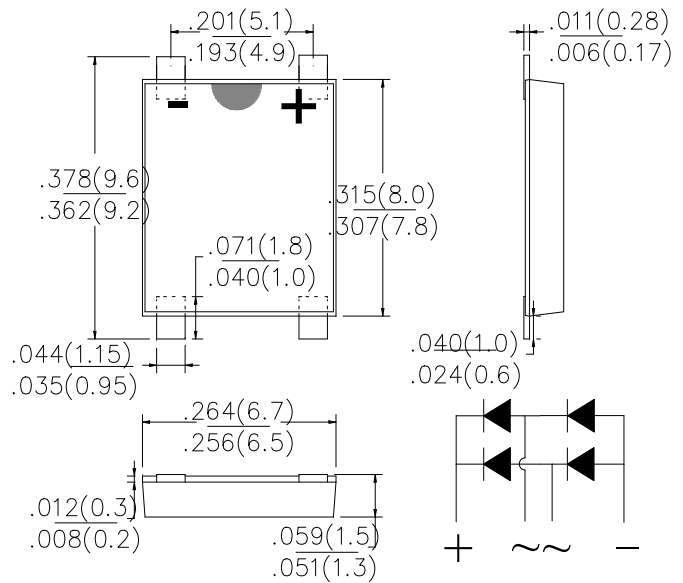
FEATURE

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- Glass passivated junction.
- Ideal for printed circuit board.
- Reliable low cost construction utilizing molded plastic technique.
- High surge current capability.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals.

MECHANICAL DATA

- Case Material: “Green” Molding compound, UL flammability classification rating 94V-0, “Halogen free”
- Moisture sensitivity level: level 2a, per J-STD-020
- Polarity: Polarity as marked on the body
- Weight: 0.204g (approximately)

TMBF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load derate current by 20%.

Catalog Number	SYMBOLS	TMBF302	TMBF304	TMBF306	TMBF308	TMBF310	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	VOLTS
Maximum Average Forward Rectified Current @ $T_C = 90^\circ C$	$I_{F(AV)}$	3.0					Amps
Peak Forward Surge Current @ 8.3ms single half sine-wave @ 1.0ms	I_{FSM}	95					Amps
		180					
Maximum Forward Voltage @ $T_J = 25^\circ C$ @ 1.5A DC	V_F	0.96					Volts
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ C$ $T_A = 125^\circ C$	I_R	5					μA
		100					μA
Typical junction Capacitance per element (Note 1)	C_J	40					pF
I^2t Rating for fusing (1ms < t < 8.3ms)	I^2t	33.6					I^2t
Typical thermal resistance(NOTE 2)	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$	10 15 55					$^\circ C/W$
Operating temperature range	T_J	-55 to +150					$^\circ C$
storage temperature range	T_{STG}	-55 to +150					$^\circ C$

NOTES:(1). Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

(2) .Thermal Resistance test performed in accordance with JESD-51. Unit mounted on glass-epoxy substrate with 1oz/ft² 20x20 mm copper pad per pin.

(3).The typical data above is for reference only(典型值仅供参考).

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Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

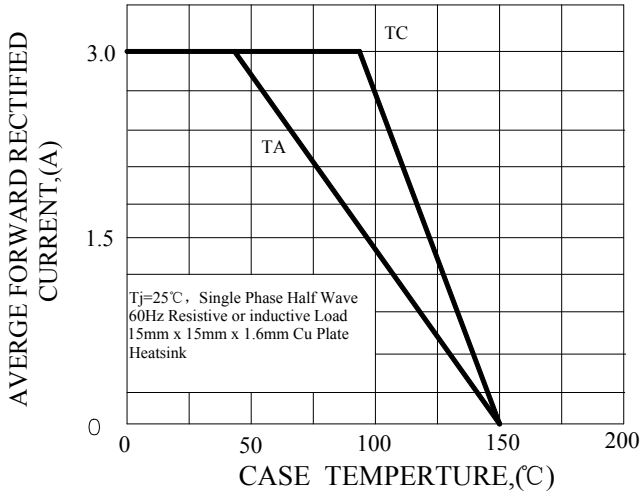


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

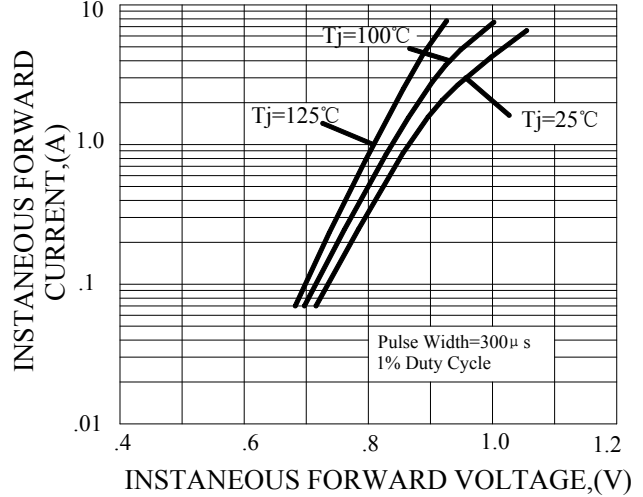


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

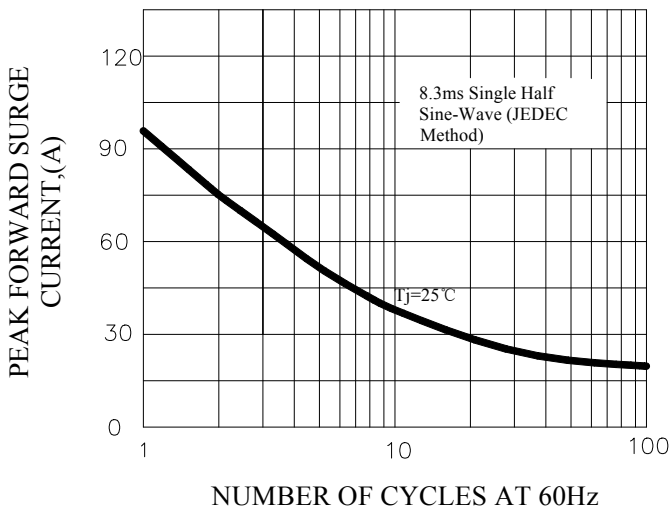


FIG.4-TYPICAL REVERSE CHARACTERISTICS

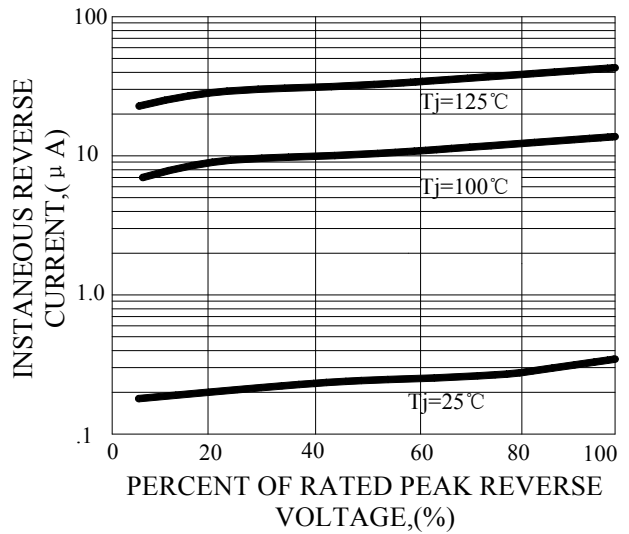


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

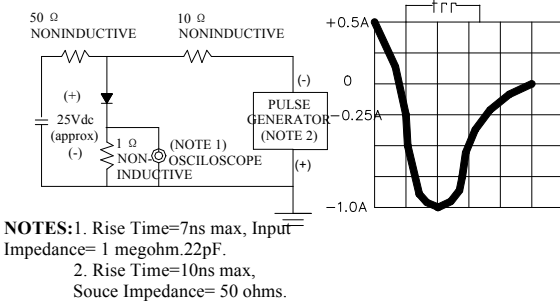
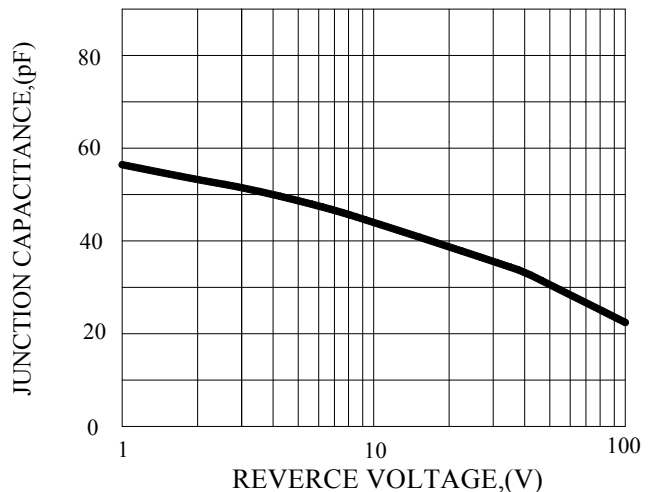


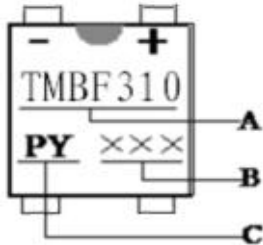
FIG.6-TYPICAL JUNCTION CAPACITANCE



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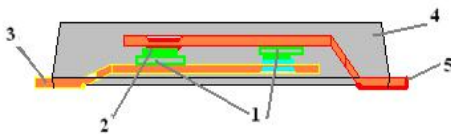
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1、Marking



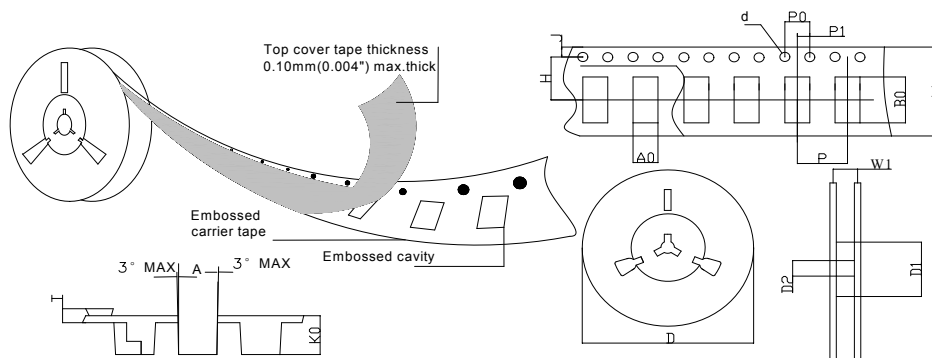
SYMBOL	Explanation
A	Product Name
B	Date Code
C	Trademark

2、Structure



SYMBOL	Explanation
1	Dice
2	Wire Bonding(Cu)
3	Lead Frame
4	Epoxy Compound
5	Plating

3、Packaging

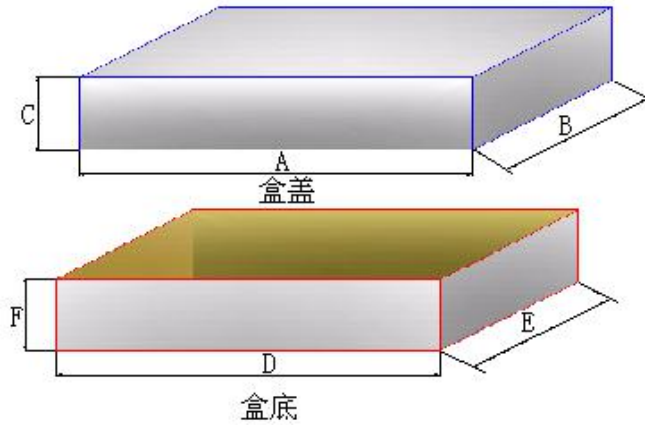


SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	TMBF	ITEM	SYM BOL	TMBF
Carrier width	A0	7.0(0.276)Max	Carrier depth	K0	1.70(0.067)Typ
Carrier length	B0	9.1(0.358)Max	Punch hole pitch	P	12.00(0.472)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(1.969)Min	Overall tape thickness	T	0.33(0.013)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	12.4(0.488)Min
Punch hole position	H	7.50(0.295)Typ			

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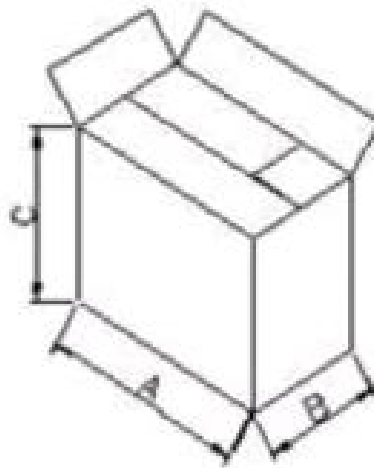
产品内盒及尺寸：（6000pcs / Box）



类别	A	B	C	D	E	F
TMBF (6K)	340	340	50	338	338	48

- 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。

产品外箱及尺寸：（48000pcs / Carton）



产品名称	包装外形	A	B	C
TMBF	装 8 个卷装内盒	385	385	360

- 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。