TBM810

SINGLE PHASE8.0AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS

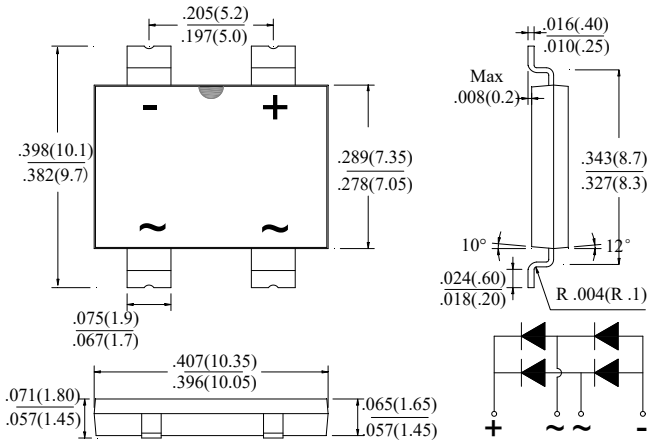
FEATURE

. Surface mount bridge, small package;
. 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, "Free halogen"
. Moisture sensitivity level:level 1,per J-STD-020
. Polarity:Polarity as marked on the body

TBM



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Type Number	SYMBOL	TBM810			units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000			V
Maximum RMS Voltage	V_{RMS}	700			V
Maximum DC blocking Voltage	V_{DC}	1000			V
Maximum Average Forward rectified Current	$I_{F(AV)}$	8.0			A
Peak Forward Surge Current @ T_J=25°C	I_{FSM}	170			A
8.3ms single half sine-wave @ T_J=125°C		140			
Peak Forward Surge Current @ T_J=25°C		340			
1.0ms single half sine-wave @ T_J=125°C		280			
Maximum Instantaneous @I_F=8.0A DC	V_F	1.1			V
Forward Voltage @I_F= 4.0A DC		1.0			
Maximum DC Reverse Current @T_J =25°C	I_R	5.0			μA
at rated DC blocking voltage @T_J =125°C		200.0			
I^2t Rating for Fusing (t < 8.3ms)	I^2t	120			A^2Sec
Typical Junction Capacitance Per Leg (Note1)	C_J	55			pF
Typical Thermal Resistance (without Heatsink)	R_J	R_{JA}	R_{JL}	R_{JC}	°C /W
		55	8	7	
Typical Thermal Resistance (Note2)		10	6	2	
Storage Temperature	T_{STG}	-55 to +150			°C
Operating Junction Temperature	T_J	-55 to +150			°C

Note:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.
   Unit mounted on 15mm x 12mm x 1.6mm AL Pad attached on 100mm x 100mm x 30mm copper plate

Ratings and Characteristics Curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

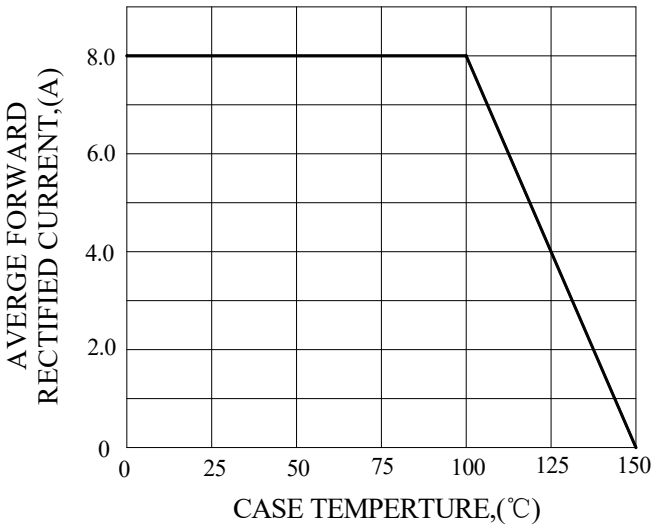


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

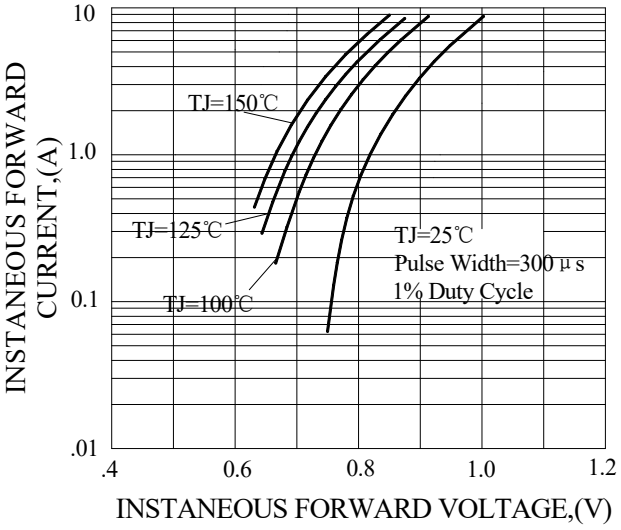


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

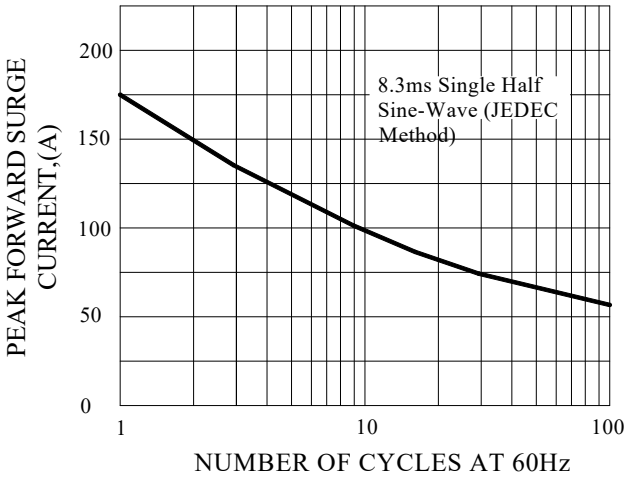


FIG.4-TYPIAL JUNCTION CAPACITANCE

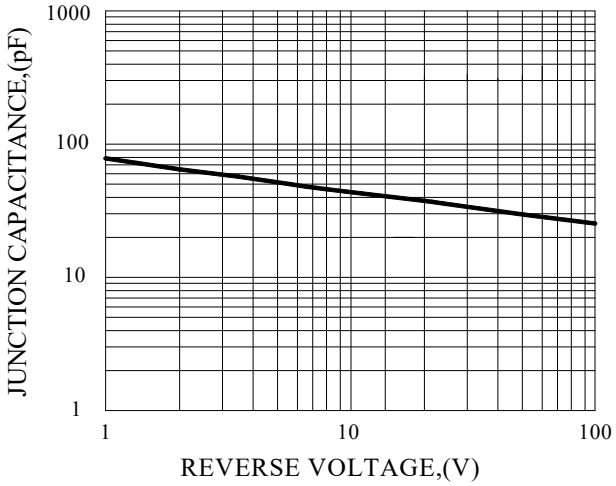
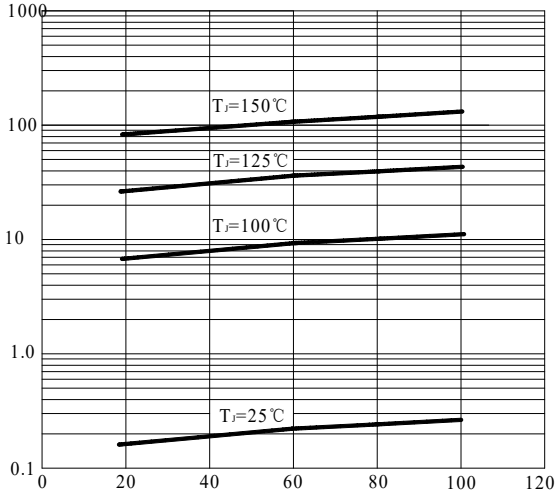
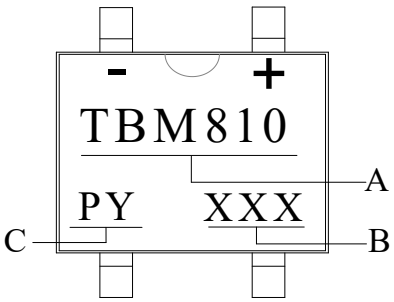


FIG.5-TYPICAL REVERSE CHARACTERISTICS



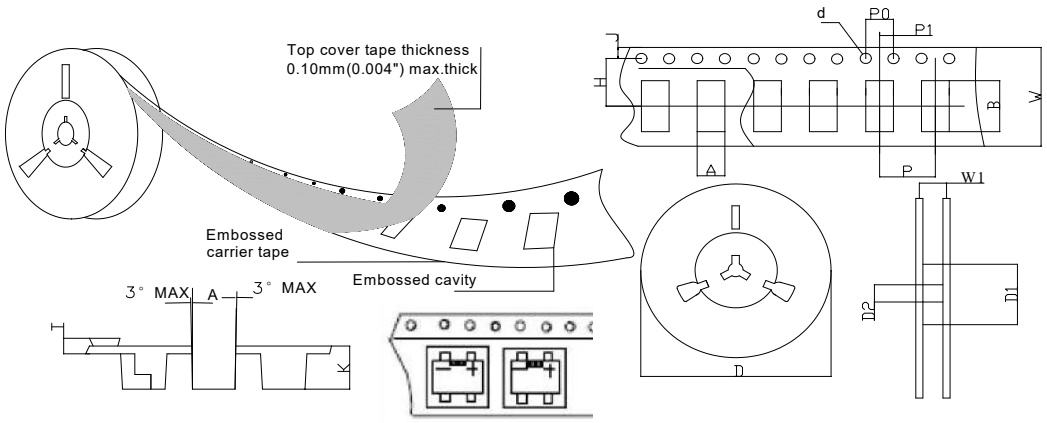
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Product Name
B	Date Code
C	Trademark

2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYMBOL	TBM	ITEM	SYMBOL	TBM
Carrier width	A	10.5(0.413)Max	Carrier depth	K	2.25(0.088)Typ
Carrier length	B	11.0(0.433)Max	Punch hole pitch	P	16.00(0.630)Typ
Sprocket hole	d	ø1.6(0.063)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	75.0(2.953)Min	Overall tape thickness	T	0.30(0.012)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	24.0(0.945)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	25.5(1.004)Min
Punch hole position	H	11.50(0.452)Typ			