

ABSR210

2.0A MPS. GLASS PASSIVATED FAST BRIDGE RECTIFIERS

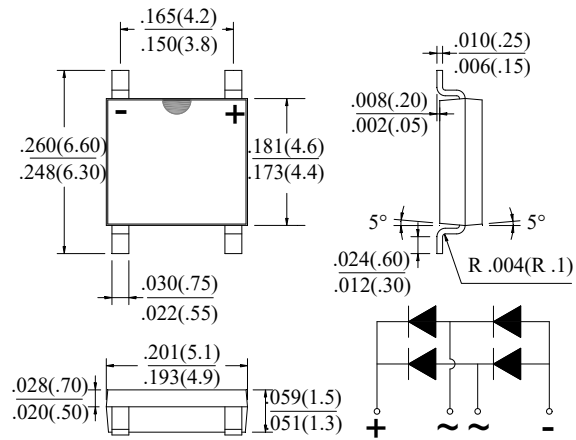
FEATURE

- . 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.
- . Small size, simple installation.

MECHANICAL DATA

- . Case: Molded plastic
- . Epoxy: UL 94V-0 rate flame retardant
- . Lead: MIL-STD- 202E, Method 208 guaranteed
- . Polarity: As marked

ABS



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%

Type Number	SYM BOL	ABSR210	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	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current times at 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	50	A
Maximum Instantaneous Forward Voltage	@IF=0.8A	1.25	V
	@IF=2.0A	1.30	
Maximum DC Reverse Current at rated DC blocking voltage	@T _J =25°C	10.0	μA
	@T _J =125°C	200.0	
Maximum Reverse Recovery Time (Note 1)	T_{rr}	500	nS
I ² t Rating for Fusing (t < 8.3ms)	I^2t	10.38	A ² Sec
Typical Junction Capacitance Per Leg (Note2)	C_J	15	pF
Typical Thermal Resistance (Note3)	R_{JA}	65	°C /W
	R_{JC}	22	
Storage Temperature	T_{STG}	-55 to +150	°C
Operating Junction Temperature	T_J	-55 to +150	°C

Note:

1. Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient mounted on P.C.B with 0.2×0.2" (5×5mm) copper pads

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

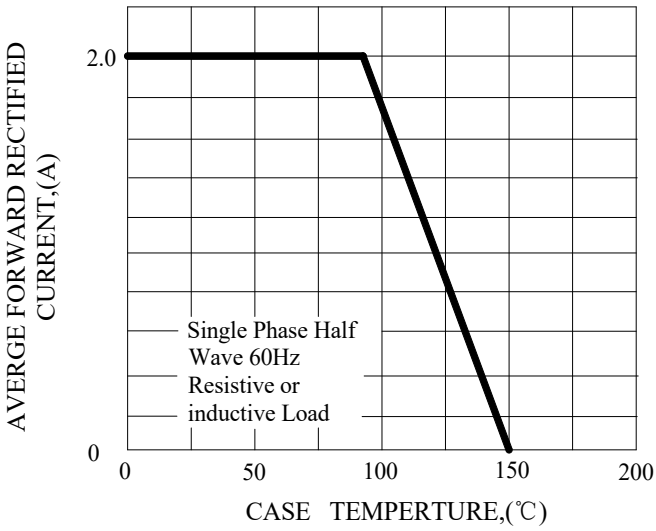


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

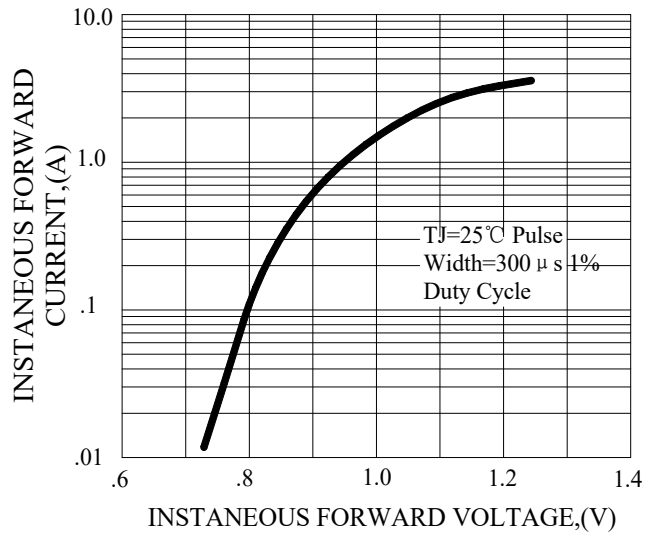


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

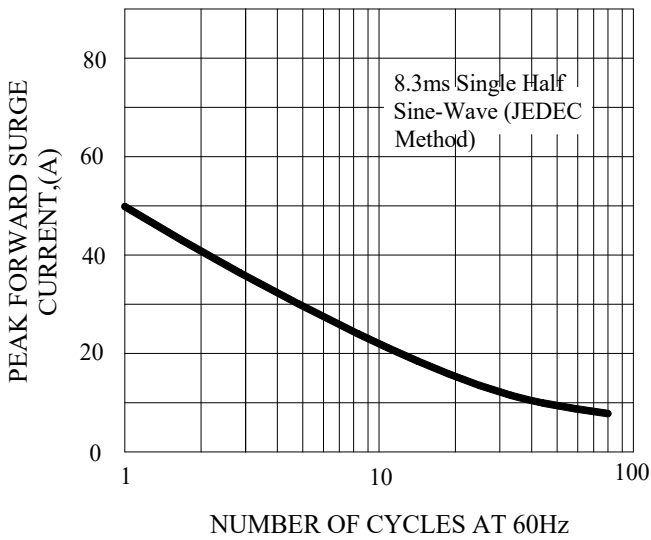


FIG.4-TYPICAL REVERSE CHARACTERISTICS

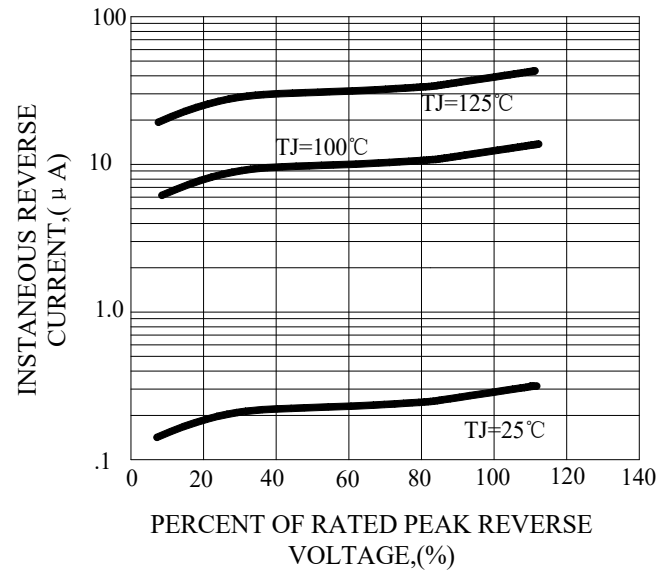
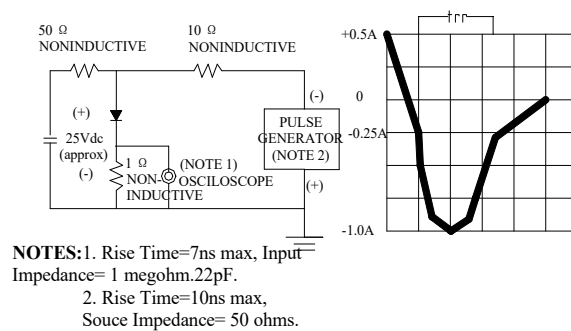
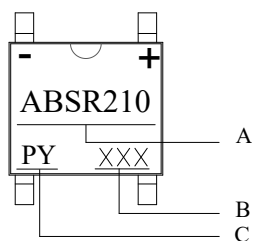


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



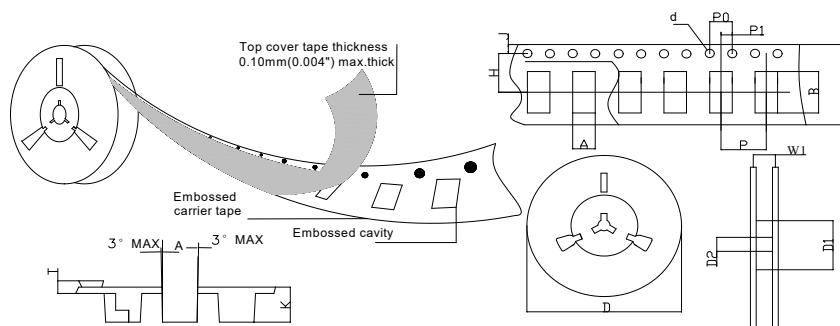
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Product Name
B	Date Code
C	Trademark

2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	ABS	ITEM	SYM BOL	ABS
Carrier width	A	5.45(0.215)Max	Carrier depth	K	1.60(0.063)Typ
Carrier length	B	7.0(0.276)Max	Punch hole pitch	P	8.00(0.315)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(2.913)Min	Overall tape thickness	T	0.30(0.012)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	12.0(0.472)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	12.4(0.488)Min
Punch hole position	H	5.50(0.217)Typ			