



ABS22 THRU ABS210

Voltage Range - 200 to 1000 Volts Current - 2.0 Ampere

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ High surge current capability



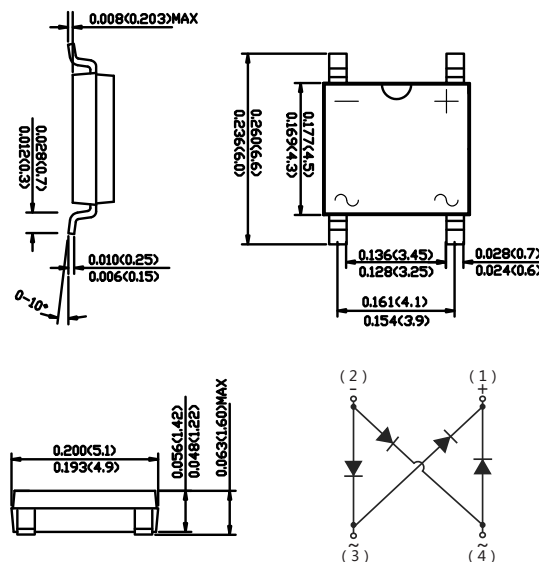
Mechanical Data

Case : JEDEC ABS Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any



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 current derate by 20%.

Parameter	SYMBOLS	HY ABS22	HY ABS24	HY ABS26	HY ABS28	HY ABS210	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	2.0					A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50					A
Maximum instantaneous forward voltage drop per leg at 2.0A	V_F	1.0					V
Rating for Fusing ($t < 8.3ms$)	I^2t	10.375					A ² s
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ C$ $T_A = 125^\circ C$	I_R	5.0 100					μA μA
Typical thermal resistance(NOTE1)	$R_{\theta JA}$ $R_{\theta JC}$	60 16					$^\circ C/W$
Typical thermal resistance(NOTE2)	C_J	25					pF
Operating temperature range	T_J	-55 to +150					$^\circ C$
storage temperature range	T_{STG}	-55 to +150					$^\circ C$

Note: 1. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

2. Measured at 1MHz and applied reverse voltage of 4 V D.C.



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Ratings And Characteristic Curves

Fig.1 Average Rectified Output Current Derating Curve

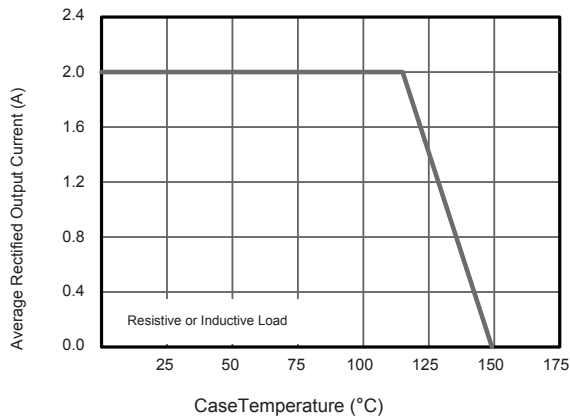


Fig.2 Typical Reverse Characteristics

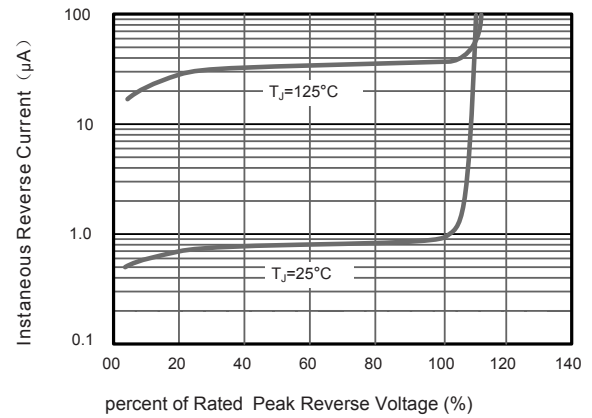


Fig.3 Typical Instantaneous Forward Characteristics T_J = 25°C

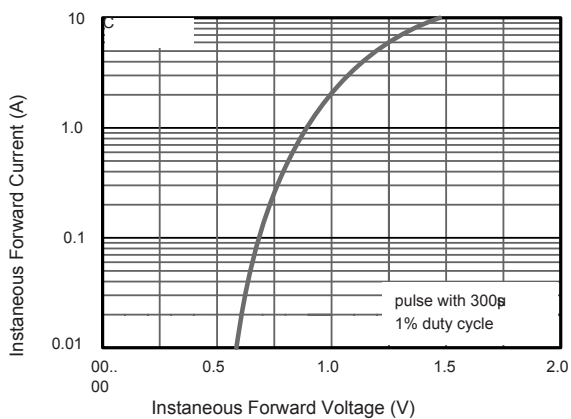


Fig.4 Typical Junction Capacitance

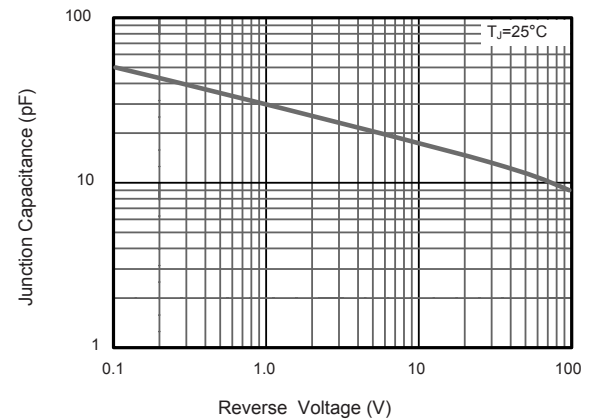
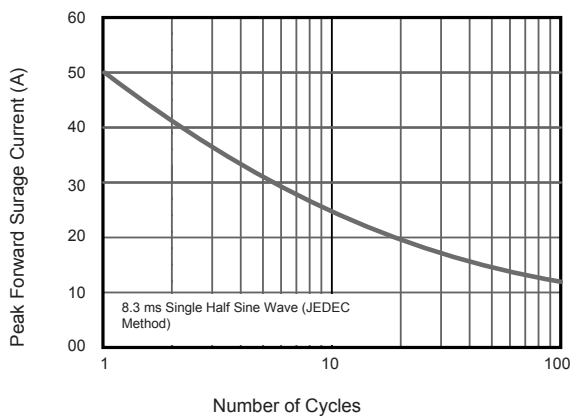


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



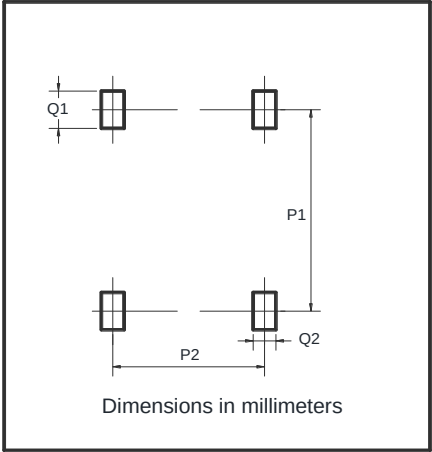
The curve above is for reference only.



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Suggested Pad Layout



Dim	Min
P1	5.72
P2	4.00
Q1	1.00
Q2	0.90