ABS05 THRU ABS10

1.0 AMP Single-Phase Surface Mount Bridge Rectifiers

VOLTAGE RANGE: 50Volts TO 1000Volts
CURRENT : 1.0 Ampere

Features

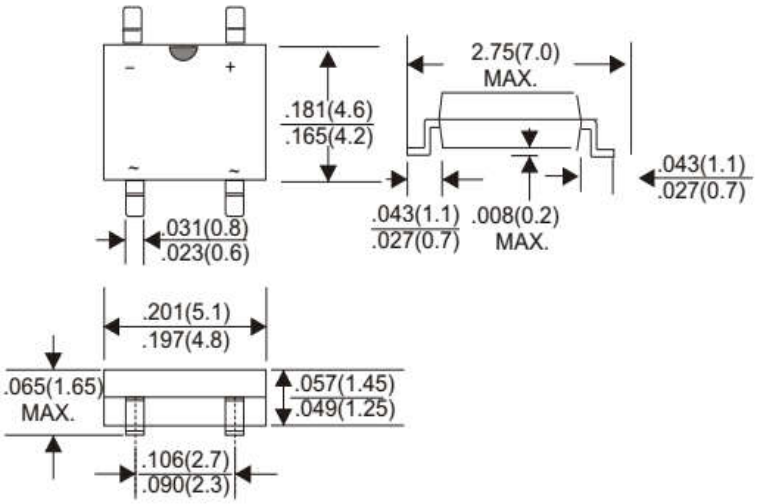
* The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
* Surge overload ratings to 30 amperes
* Ideal for Printed Circuit Board Application
* High temperature soldering guaranteed 265'C/10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

* Case: Molded plastic: ABS
* Terminals: Plated leads solderable per MIL-STD-202, method 208
* Polarity: Polarity symbols molded on body
* Mounting position: Any
* Weight: 0.12 grams(approx)

ABS of Top View

PKG: ABS



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating 25'C ambient temperature uniess otherwies specified, Resistive or Inductive load, 60Hz.
For capacitive load derate current by 20%.

TYPE NUMBER			ABS05	ABS1	ABS2	ABS4	ABS6	ABS8	ABS10	units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current T_A=40'C note 3		$I_{F(AV)}$	1.0							A
Peak Forward Surge Current single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	30							A
Maximum Instantaneous Forward Voltage drop per leg at 0.4A		V_F	1.0							V
Maximum DC Reverse Current at Rate DC Blocking Voltage per element	T_J=25'C	I_R	5.0							uA
	T_J=125'C		500							
Rating for fusing (t<8.3ms)		I^2t	10							A^2sec
Typical Thermal Resistance per element Note1		ReJA	75							'C/W
Typical Junction capacitance per element Note2		Cj	25.0							pF
Operating and Storage Temperature Range		T_J, T_{STG}	- 55 ~ + 150							'C

Note: 1.thermal resistance from junction to Ambemt on P.C. Board mounting

2. Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

3. R-load on aluminum substrate T_A=25'C.

Typical Characteristics (TJ = 25'C unless otherwise noted)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

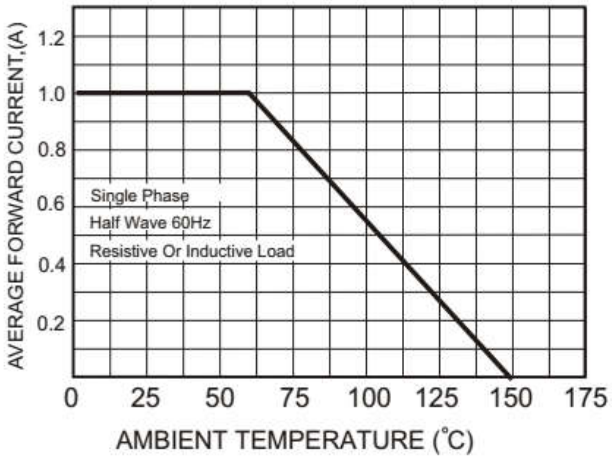


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

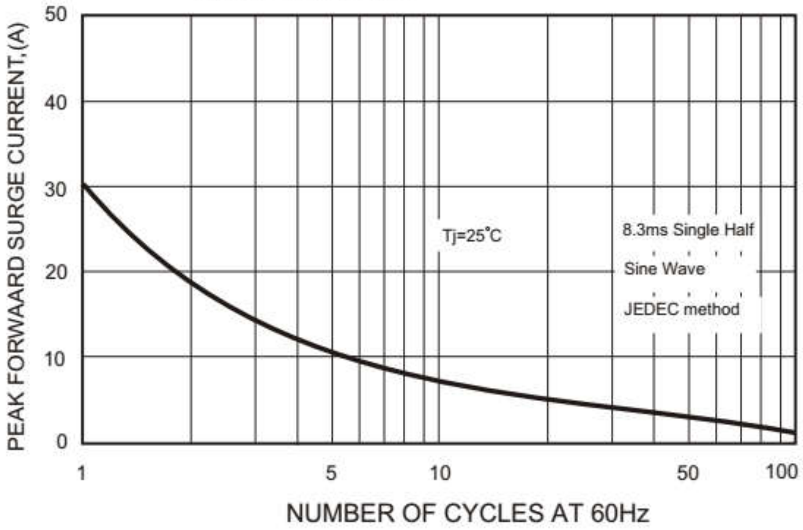


FIG.3-TYPICAL FORWARD CHARACTERISTICS

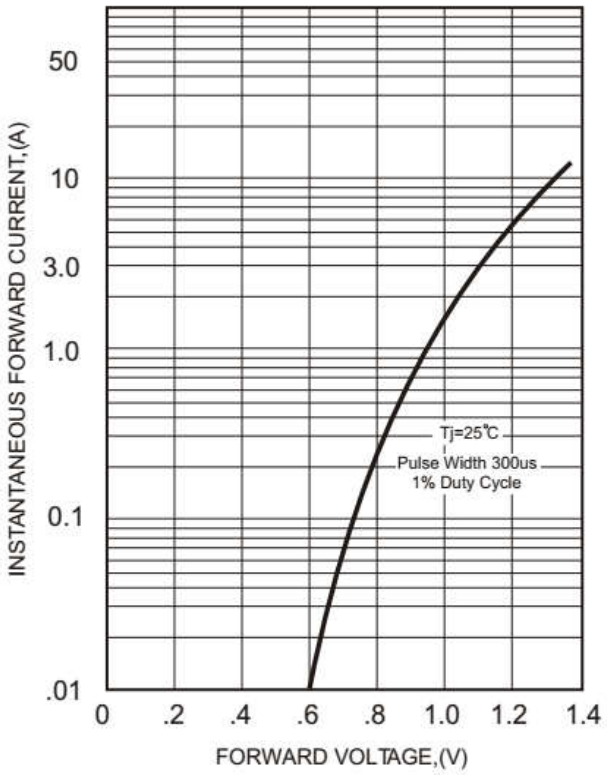


FIG.4-TYPICAL REVERSE CHARACTERISTICS