

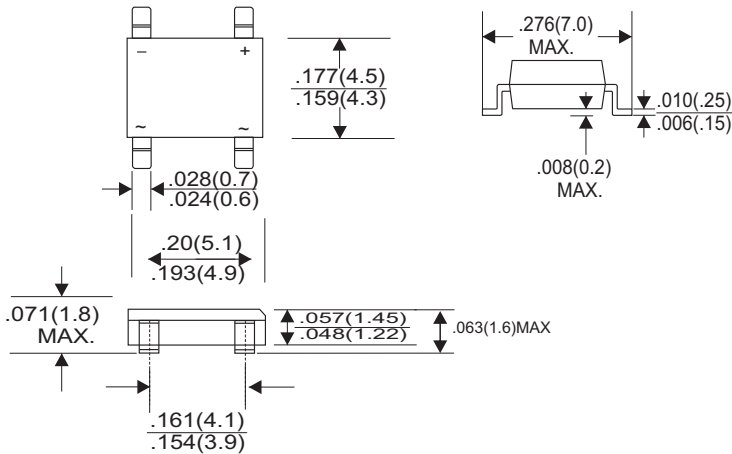


# ABS05 THRU ABS10

## SINGLE PHASE BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 0.8/1.0 Ampere

### ABS



Dimensions in inches and (millimeters)

### FEATURES

- \* Glass Passivated Die Construction
- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	ABS05	ABS1	ABS2	ABS4	ABS6	ABS8	ABS10	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta=40°C(Note 1)	0.8/1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	3.0							A
Maximum Forward Voltage Drop per Bridge Element at 0.4A D.C.	1.0							V
Maximum DC Reverse Current Ta=25°C	5.0							μA
at Rated DC Blocking Voltage Ta=125°C	500							μA
Typical Junction Capacitance Per Element (Note 3)	15							pF
Typical Thermal Resistance RθJA (Note 4)	75							°C/W
Operating Temperature Range, Tj	-55 — +150							°C
Storage Temperature Range, Tstg	-55 — +150							°C

- NOTES: 1. On glass epoxy P.C.B. mounted on 0.05(x0.05)(1.3x1.3mm) pads.  
2. On aluminum substrate P.C.B. with on area of 0.8"x0.8"(20x20mm) mounted on 0.05x0.05"  
3. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2x0.2"(5x5mm)  
4. Measured at 1.0MHz and reverse of 4.0V DC.

# RATING AND CHARACTERISTIC CURVES (ABS05 THRU ABS10)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

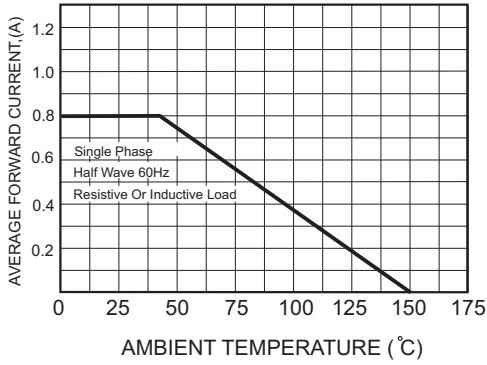


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

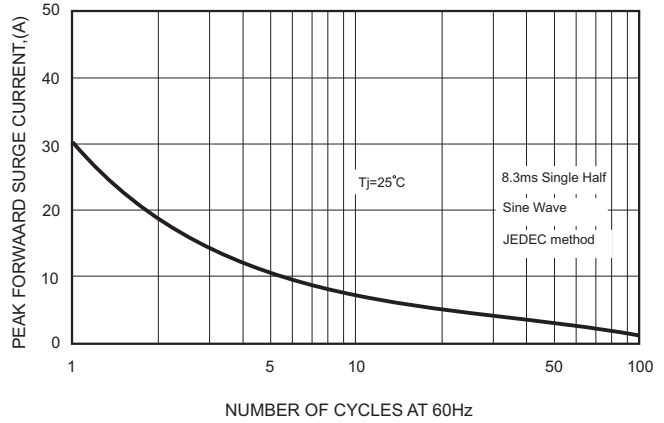


FIG.3-TYPICAL FORWARD CHARACTERISTICS

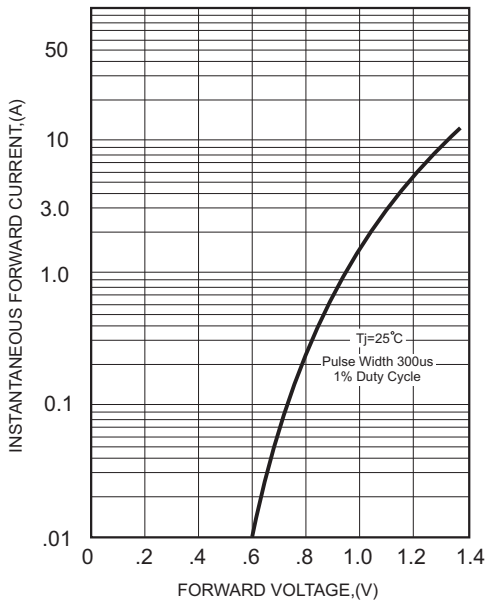


FIG.4-TYPICAL REVERSE CHARACTERISTICS

