

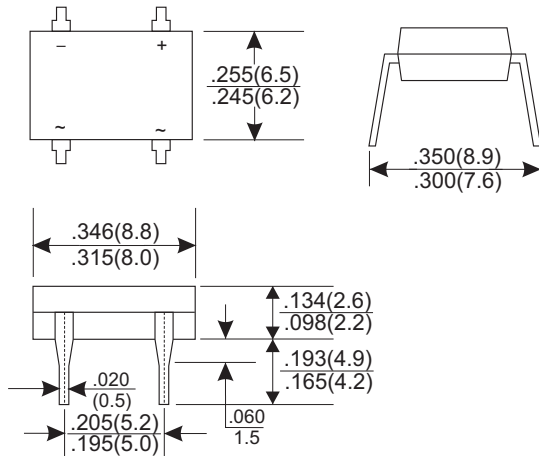


DB101 THRU DB107

SINGLE PHASE BRIDGE RECTIFIERS

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

DB-1



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	DB101	DB102	DB103	DB104	DB105	DB106	DB107	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 .375"(9.5mm) Lead Length at Ta=75°C								1.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								30	A
Maximum Instantaneous Forward Voltage at 1.0A								1.1	V
Maximum DC Reverse Current Ta=25°C								10	μA
at Rated DC Blocking Voltage Ta=100°C								500	μA
Typical Junction Capacitance (Note 1)								25	pF
Typical Thermal Resistance RθJA (Note 2)								40	°C/W
Operating and Storage Temperature Range Tj, Tstg								-65 — +150	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient mounted on PC board with 13mm² copper pad

RATING AND CHARACTERISTIC CURVES (DB101 THRU DB107)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

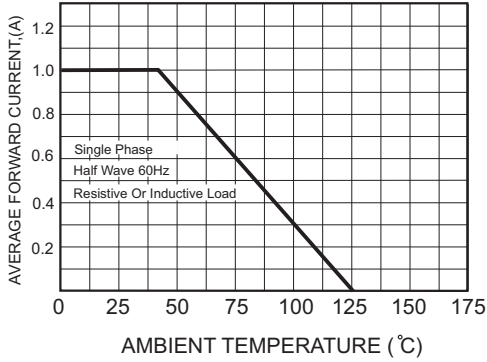


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

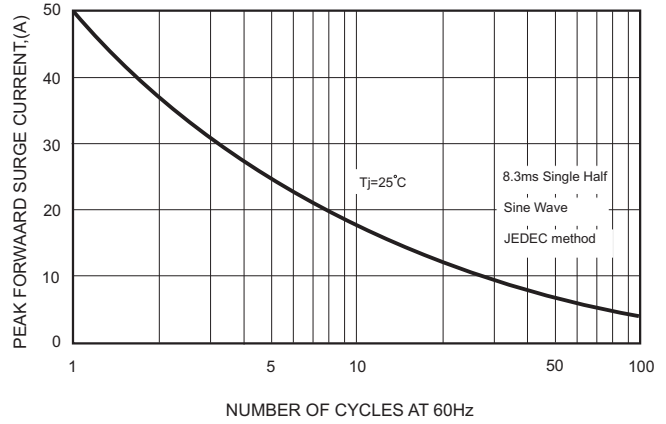


FIG.3-TYPICAL FORWARD CHARACTERISTICS

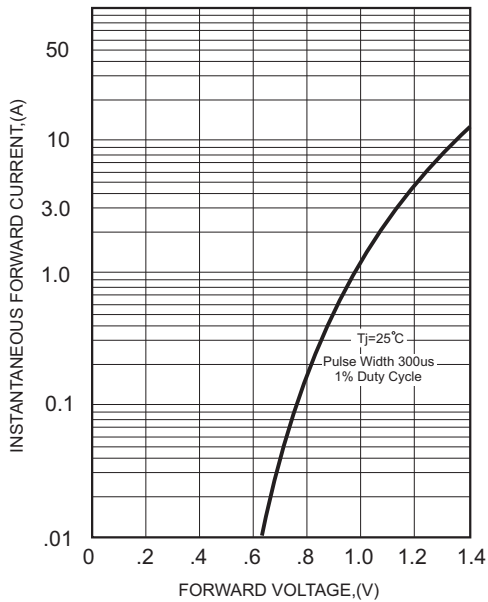


FIG.4-TYPICAL REVERSE CHARACTERISTICS

