

SILICON BRIDGE RECTIFIERS

DF005 THRU DF10 AND DB101 THRU DB107

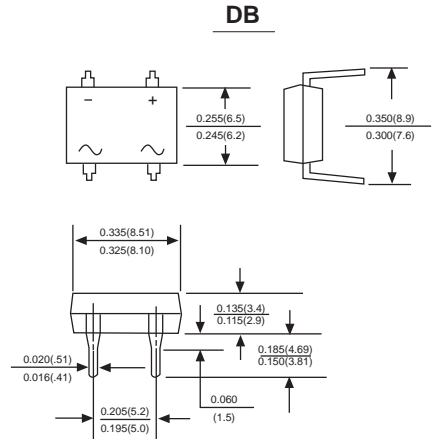
VOLTAGE RANGE 50 to 1000 Volts
CURRENT 1.0 Ampere

FEATURES

- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds, 5 lbs. (2.3kg) tension

MECHANICAL DATA

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols marked on case
- Mounting Position : Any
- Weight: 0.02 ounce, 0.4 grams



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 current capacitive load derate by 20%.

	SYMBOLS	DF005 DB101	DF01 DB102	DF02 DB103	DF04 DB104	DF06 DB105	DF08 DB106	DF10 DB107	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward output rectified current 0.06" (1.5mm) lead length at $T_A=40^\circ\text{C}$ (Note 2)	$I_{(AV)}$	1.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0							Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10							A^2s
Maximum instantaneous forward voltage drop per bridge element at 1.0A	V_F	1.1							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	10							μA
		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-65 to +150							$^\circ\text{C}$
storage temperature range	T_{STG}	-65 to +150							$^\circ\text{C}$

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P.C. board with 0.51" x 0.51" (13x13mm) copper pads.

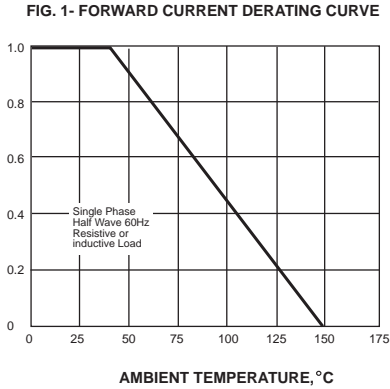
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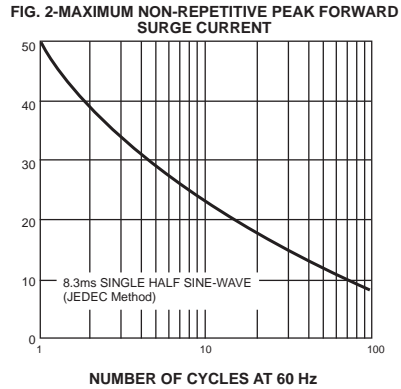
VOLTAGE RANGE
CURRENT

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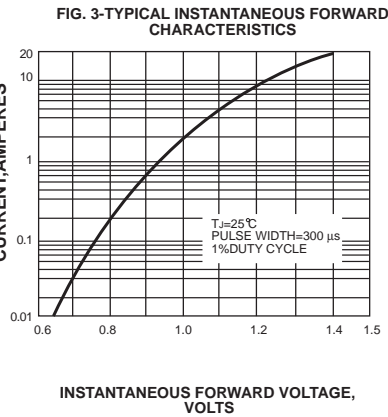
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



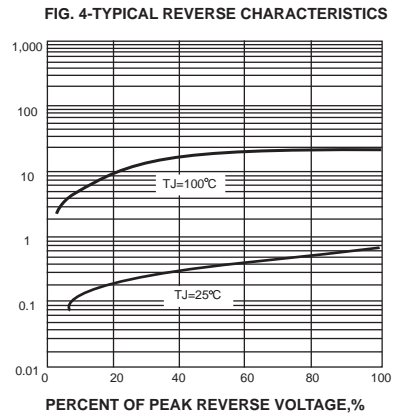
PEAK FORWARD SURGE CURRENT,
AMPERES



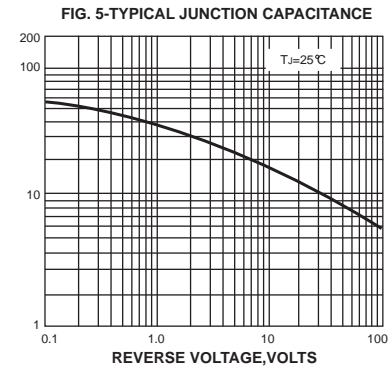
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE,
°C/W

