

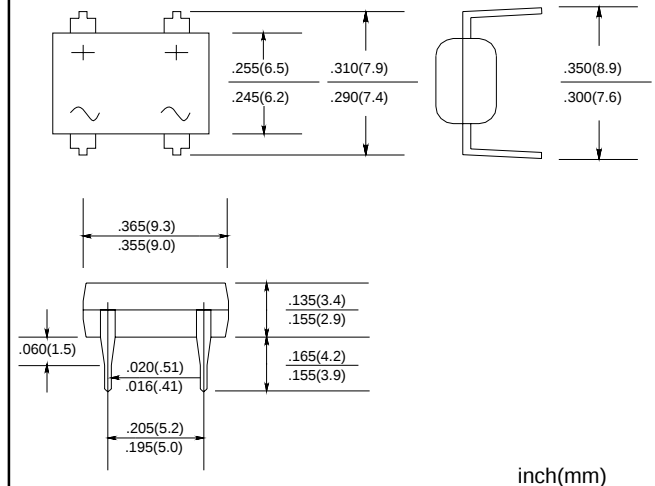
SILICON BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 --- 400 V
CURRENT: 1.0 A

FEATURES

- ◇ Rating to 400VPRV
- ◇ Surge overload rating to 30 Amperes peak
- ◇ Ideal for printed circuit board
- ◇ Reliable low cost construction utilizing molded
- ◇ Lead solderable per MIL-STD-202 method 208
- ◇ Lead: silver plated copper, solderde plated
- ◇ Plastic material has UL flammability classification 94V-O
- ◇ Polarity symbols molded on body
- ◇ Weight: 1.0 grams

DB-1



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

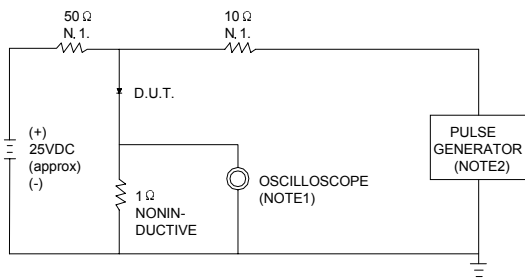
		EDB 101	EDB 102	EDB 103	EDB 104	EDB 105	EDB 106	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	300	400	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	V
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	V
Maximum average forw ard Output current @T _A =55°C	I _{F(AV)}	1.0						A
Peak forw ard surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	30.0						A
Maximum instantaneous forw ard voltage at 1.0 A	V _F	1.0						V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	10.0 1.0						μA mA
Maximum reverse recovery time (NOTE 1)	t _{rr}	50						nS
Typical junction calacitance (NOTE 2)	C _J	15				10		pF
Operating junction temperature range	T _J	- 55 ---- + 150						°C
Storage temperature range	T _{STG}	- 55 ---- + 150						°C

NOTE: 1. Test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.

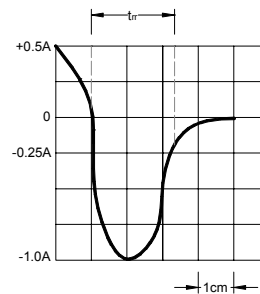
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

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FIG.1 -- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. RISE TIME = 7ns MAX. INPUT IMPEDANCE = 1MΩ, 22pF
2. RISE TIME = 10ns MAX. SOURCE IMPEDANCE = 50Ω



SET TIME BASE FOR
10 ns / cm

FIG.2 -- TYPICAL FORWARD CURRENT DERATING CURVE

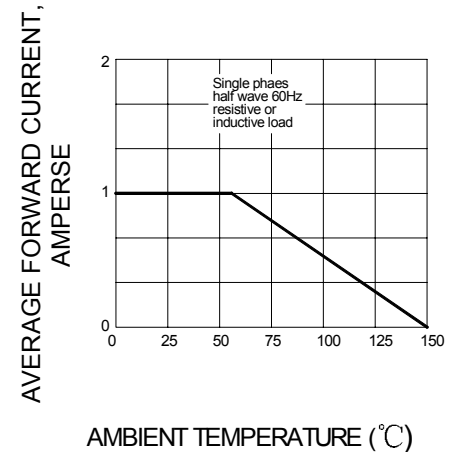


FIG.3 -- TYPICAL REVERSE CHARACTERISTICS

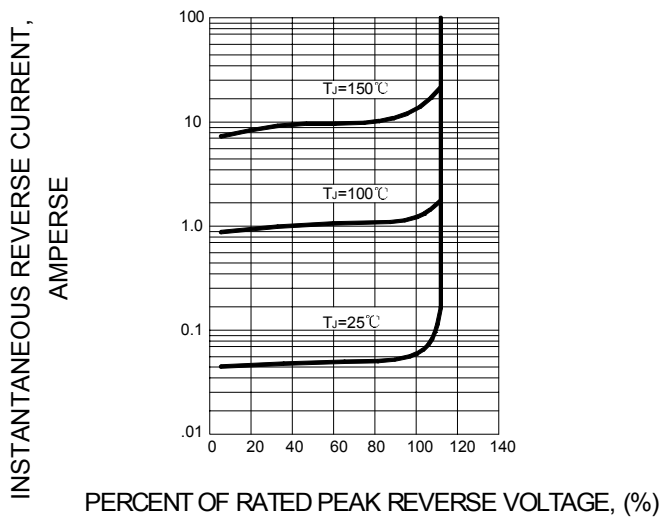


FIG.4 -- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

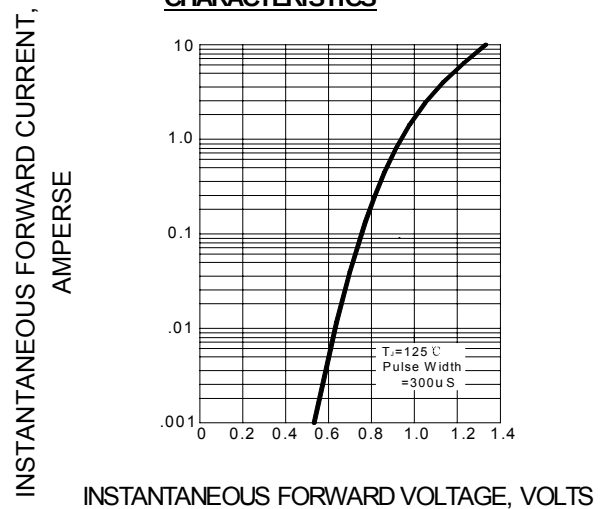


FIG.5 -- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

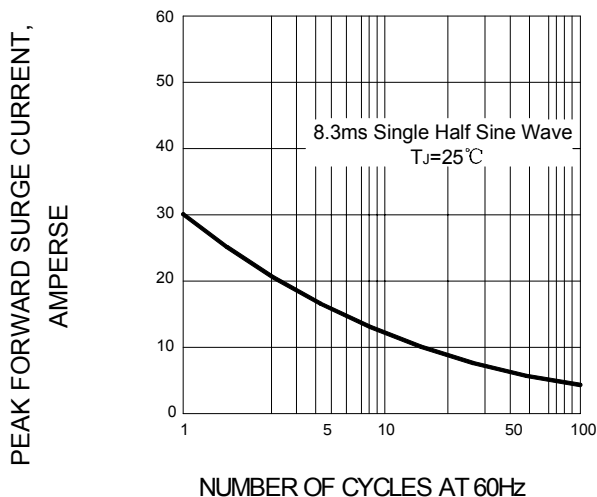


FIG.6 -- TYPICAL JUNCTION CAPACITANCE

