

SILICON BRIDGE RECTIFIERS
EDB101--EDB106
SFEATURES

- Rating to 1000V PRVP
- Surge overload rating to 30 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208
- Glass passivated chip junctions
- Plastic material has UL flammability classification94V-O


Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	EDB101	EDB102	EDB103	EDB104	EDB105	EDB106	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	150	200	300	400	V
RMS Reverse Voltage	V_{RMS}	35	70	105	140	210	280	V
DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	V
Maximum average forward Output current @TA=55°C	$I_{F(AV)}$	1.0						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	30						A

Thermal Characteristics

Characteristic	Symbol	EDB101	EDB102	EDB103	EDB104	EDB105	EDB106	UNITS
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

Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	EDB101	EDB102	EDB103	EDB104	EDB105	EDB106	UNITS
Maximum instantaneous forward voltage at 1.0 A	V_F	1.0						V
Maximum reverse current @TA=25°C at rated DC blocking voltage @TA=100°C	I_R	10 1.0						μ A mA
Maximum reverse recovery time (NOTE 1)	t_{rr}	50						ns

 NOTE: 1. Test conditions: $I_F=0.5A$, $I_R=-1.0A$, $IRR=-0.25A$.

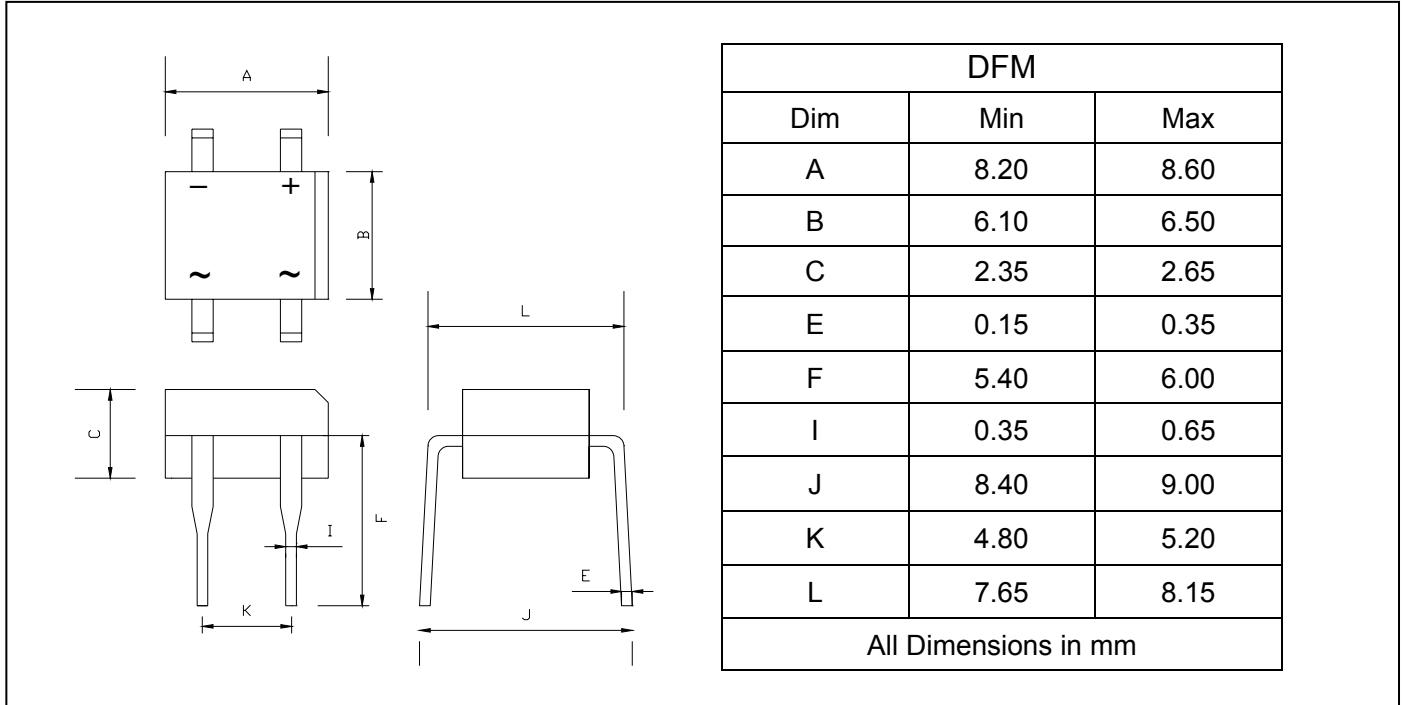
2. Measured at 1 MHz and applied reverse voltage of 4.0 v olts.



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PACKAGE OUTLINE DIMENSIONS



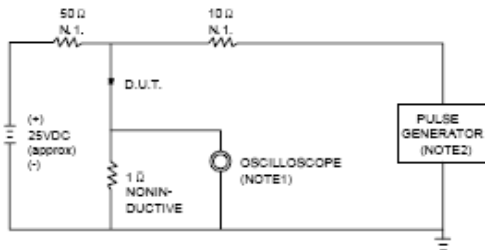
PACKAGE INFORMATION

Device	Package	Shipping
EDB101--EDB106	DFM	50unit/pipe

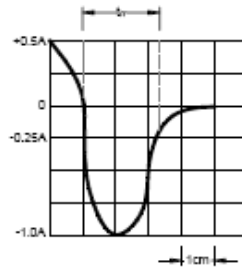
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FIG.1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

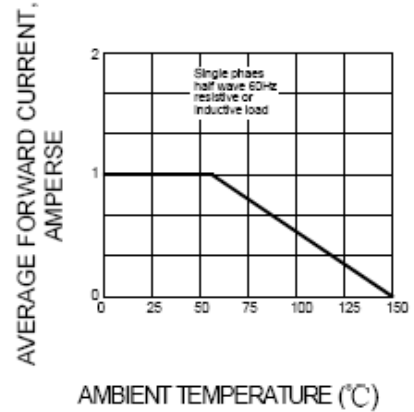


FIG.3 – TYPICAL REVERSE CHARACTERISTICS

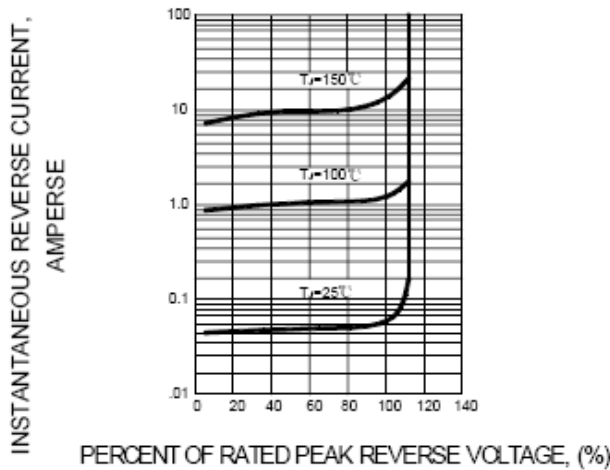


FIG.4 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

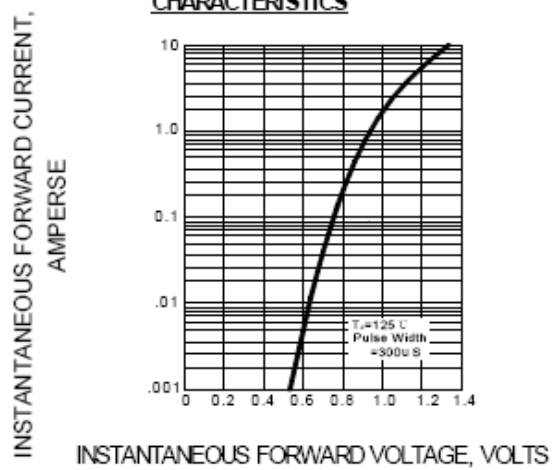


FIG.5 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

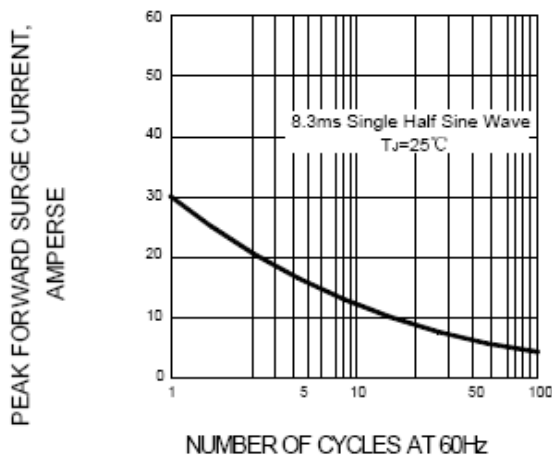


FIG.6 – TYPICAL JUNCTION CAPACITANCE

