FDB101S thru FDB107S

SURFACE MOUNT FAST RECOVERY GLASS PASSIVATED RECTIFIERS

REVERSE VOLTAGE - **50** to **1000** Volts
FORWARD CURRENT - **1.0** Ampere

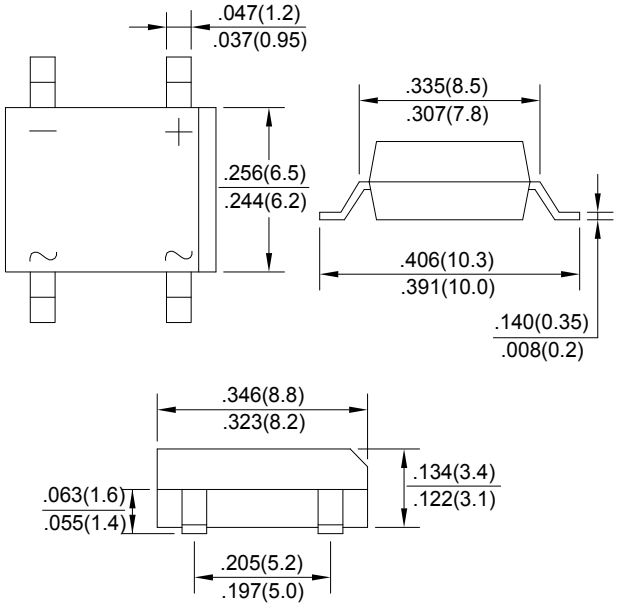
FEATURES

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Polarit:As marked on Body
- Weight:0.02 ounces,0.38 grams
- Mounting position:Any

DBS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	FDB 101S	FDB 102S	FDB 103S	FDB 104S	FDB 105S	FDB 106S	FDB 107S	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_A=40 ℃	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	30							A
Peak Forward Voltage at 1.0A DC	V_F	1.3							V
Maximum DC Reverse Current @T_A=25℃ at Rated DC Blocking Voltage @T_A=125℃	I_R	5.0 500							μA
Maximum Reverse Recovery Time(Note 1)	T_{RR}	150				250	500		nS
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	40							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

NOTES: 1.Reverse Revcovery Tes Conditions: I_F=0.5A,I_R=1A,I_{RR}=0.25A.

2.Thermal resistance for junction to ambient and from Junction to Lead Mounted on P.C.B.with 0.5"*0.5"(13mm*13mm) Coppet Pads.

3.The typical data above is for reference only(典型值仅供参考).

FIG. 1 – FORWARD CURRENT DERATING CURVE

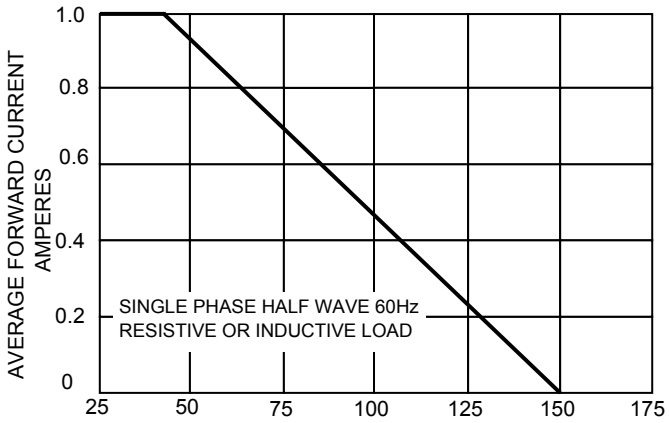


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

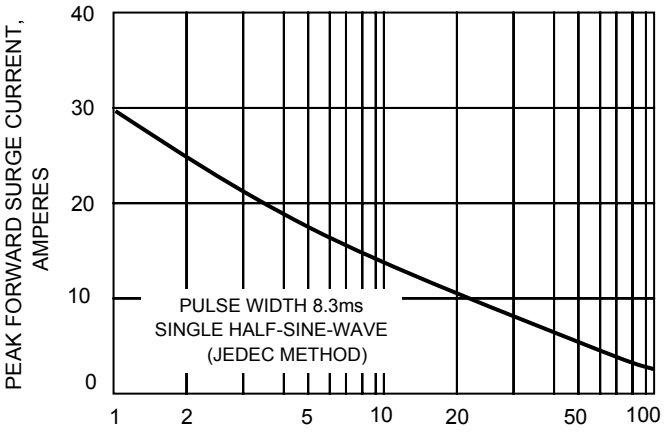


FIG.3-TYPICAL FORWARD CHARACTERISTICS

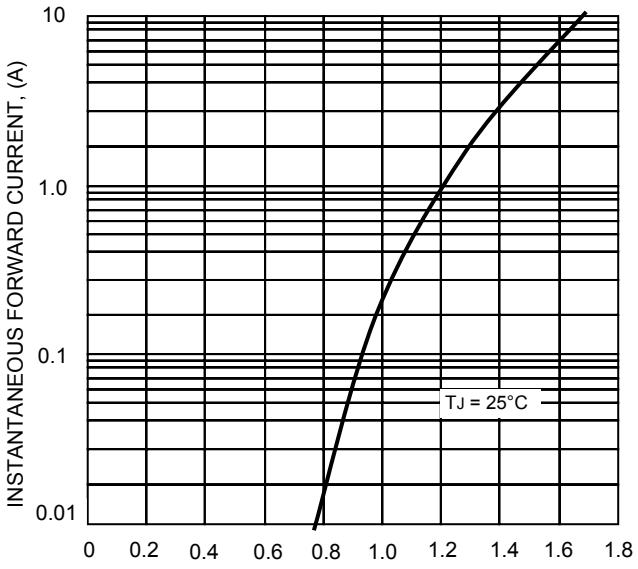
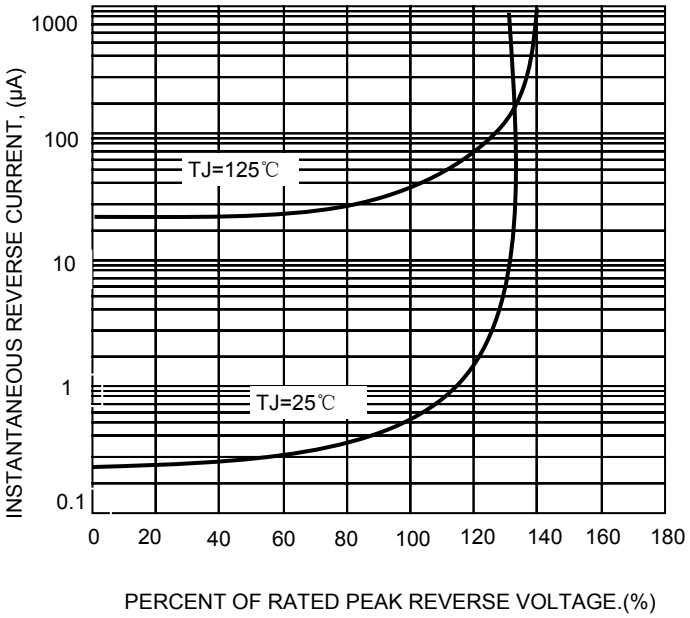


FIG.4-TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

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