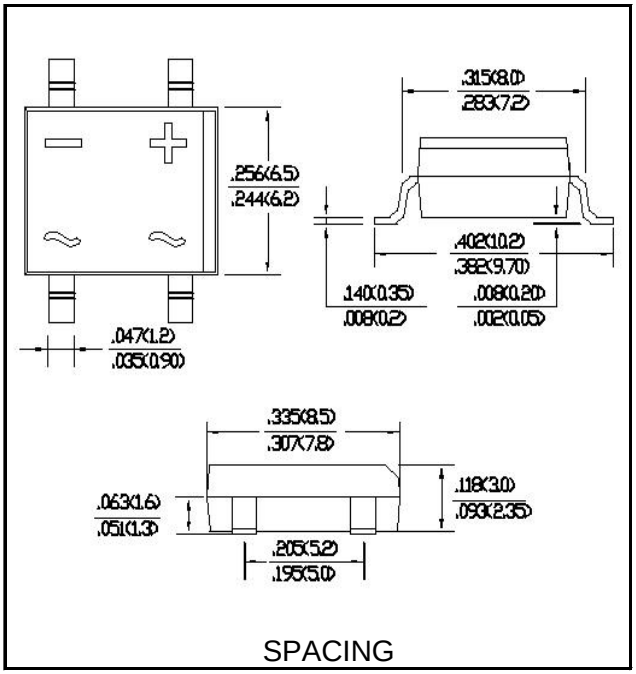
1.0A Single-Phase GLass Passivated Bridge Rectifiers

Recifiter Reverse Voltage 50V to 1000V

DBS



SPACING

Features

- ●Glass passivated junction
- ●The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- ●Suge overload ratings to 35 amperes peak
- ●Ideal for printed circuit board application
- ●High temperature soldering guaranteed 265℃/10 seconds at 5 lbs(2.3kg)tension

Mechanical Data

Case:Molded plastic
Terminals:Platde leads solderable per MIL-STD-750, Method 2026
Polarity:Polarity symbols molded or Marked on body
Mounting Position:Any
Weight:0.011ounce,0.30 grams(approx)

Maximum Ratings & Thermal Characteristics

Rating at 25℃ ambient temperature unless otherwise specified,Resistive or inductive load,60HZ.
For Capacitive load derate current by 20%

Parameter	Symbol	FDB 101S	FDB 102S	FDB 103S	FDB 104S	FDB 105S	FDB 106S	FDB 107S	unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS bridge input 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 output current at TA=40℃	$I_{F(AV)}$	1.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35							A
Maximum reverse recovery time at (Note)	T_{rr}	150				300		500	nS
Rating for fusing(t<8.3ms)	I^2t	5							A^2sec
Typical thermal resistance per element(1)	C_j	16							p F
Typical thermal resistance per element(2)	$R_{\theta JA}$	63							℃/w
Operating junction and stroage temperature range	TJ	-55to+150							℃
	T_{STG}	-55to+150							℃

Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified,Resistive or inductive load,60HZ.
For Capacitive load derate current by 20%

Parameter	Symbol	FDB 101S	FDB 102S	FDB 103S	FDB 104S	FDB 105S	FDB 106S	FDB 107S	unit
Maximum instantaneous forward voltage drop per leg at 1.0A	V_F	0.95			1.25				V
Maximum DC reverse current at ratde TA=25℃	I_R	10							μ A
DC blocking voltage per element TA=125℃		500							

Notes: (1)Measured at 1.0MHz and applied reverse voltage of 4.0 V DC.
(2)Thermal resistance from junction to ambient mounted on P.C.B with 0.5*0.5(13*13mm)copper pads

Rating and Characteristic Curves(TA=25℃ Uniless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

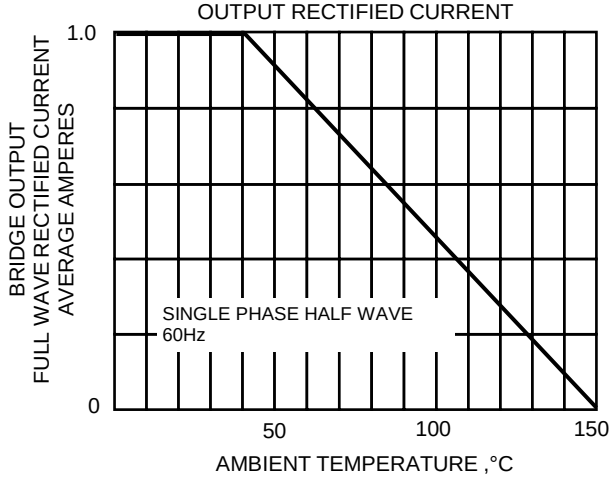


FIG.2-MAXIMUM NON-REPETITIVE SUNRGE CURRENT

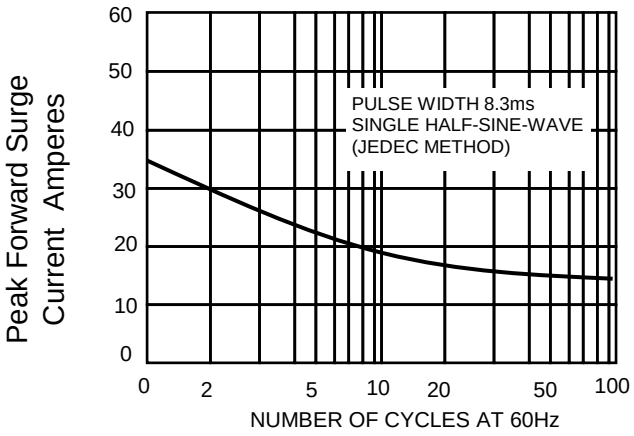


FIG.3-TYPICAL JUNCTION

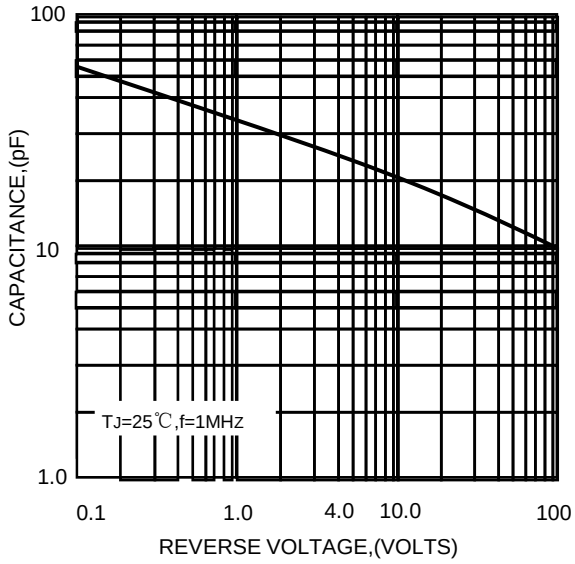


FIG.4-TYPICAL FORWARD CHARACTERISTICS

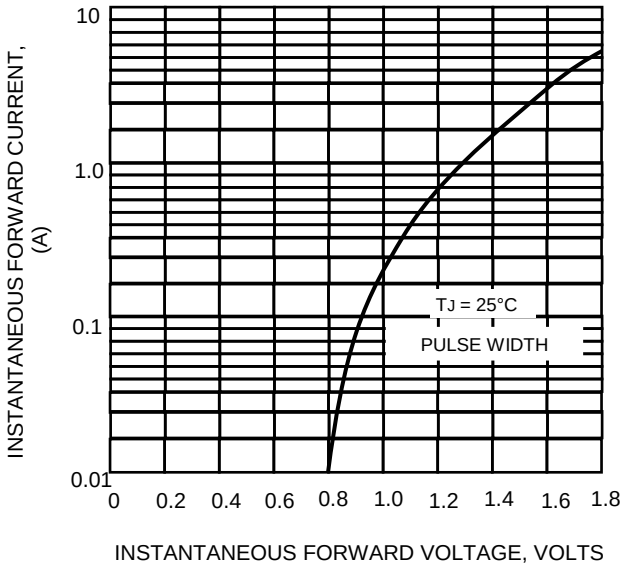
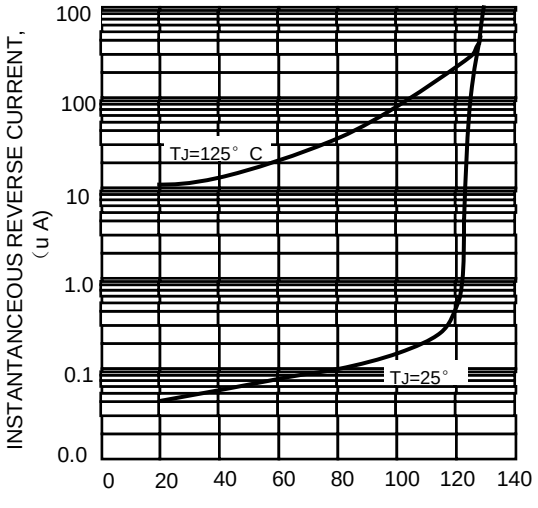


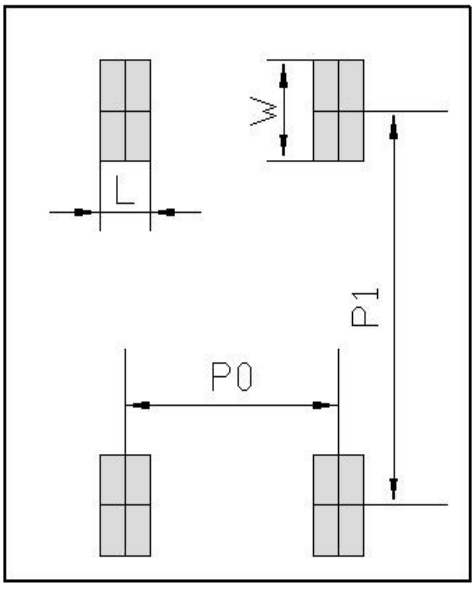
FIG.5-TYPICAL REVERSE CHARACTERISTICS



Ordering Information(Example)

PREFFREN P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FDB101S~FDB107S	Approximate 0.30	50	5000	20000	TUBE
FDB101S~FDB107S	Approximate 0.30	1500	3000	21000	REEL

Suggested pad layout



Dimensions in millimeters

	Unit:mm
DIM	MIN
P0	5.12
P1	8.73
L	1.2
W	2.22