

2.0A Single-Phase GLass Passivated Bridge Rectifiers

Recifier Reverse Voltage 50V to 1000V



DBS

Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Suge overload ratings to 60 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs(2.3kg)tension

Mechanical Data

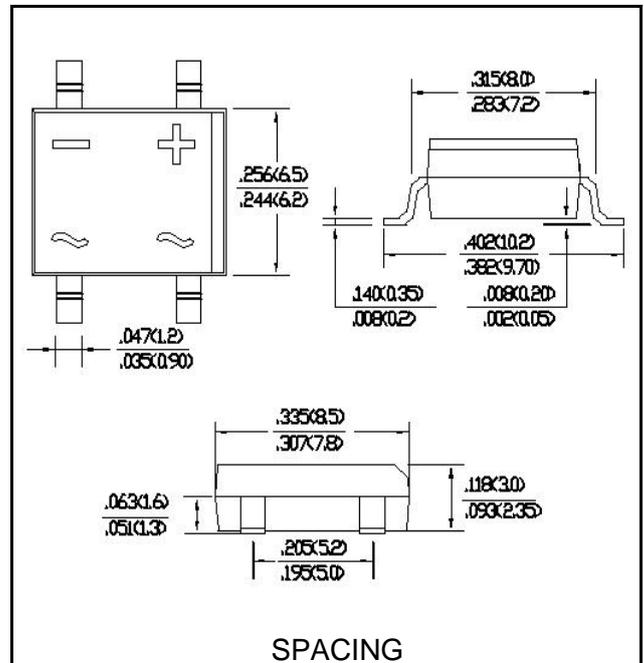
Case:Molded plastic

Terminals:Platde leads solderable per MIL-STD-750,
Method 2026

Polarity:Polarity symbols molded or Marked on body

Mounting Position:Any

Weight:0.01ounce,0.3 grams(approx)



Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified,Resistive or inductive load,60HZ.

For Capacitive load derate current by 20%

Parameter	Symbol	FDB 201S	FDB 202S	FDB 203S	FDB 204S	FDB 205S	FDB 206S	FDB 207S	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°C	I _{F(AV)}	2.0							A
Peak forward surge current 8.3ms single sine-wave super imposed on rated load (JEDEC Method)	I _{FSM}	60							A
Maximum reverse recovery time at (Note)	T _{rr}	150			300		500		nS
Rating for fusing(t<8.3ms)	I ² t	15							A ² sec
Typical Junction capacitance Per Element(Note 1)	C _j	25							p F
Typical thermal resistance (Note 2)	R _{θJA}	68							°C/w
Operating j temperature range	T _J	-55to+150							°C
Storage temperature range	T _{STG}	-55to+150							°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified,Resistive or inductive load,60HZ.

For Capacitive load derate current by 20%

Parameter	Symbol	FDB 201S	FDB 202S	FDB 203S	FDB 204S	FDB 205S	FDB 206S	FDB 207S	unit
Maximum instantaneous forward voltage drop per leg at 2.0A	V _F	0.95			1.25				V
Maximum DC reverse current at ratde TA=25°C	I _R	10							μ A
DC blocking voltage per element TA=125°C		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°C Unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

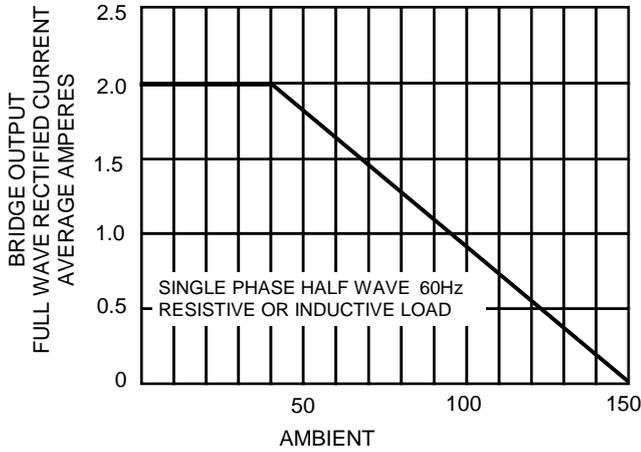


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

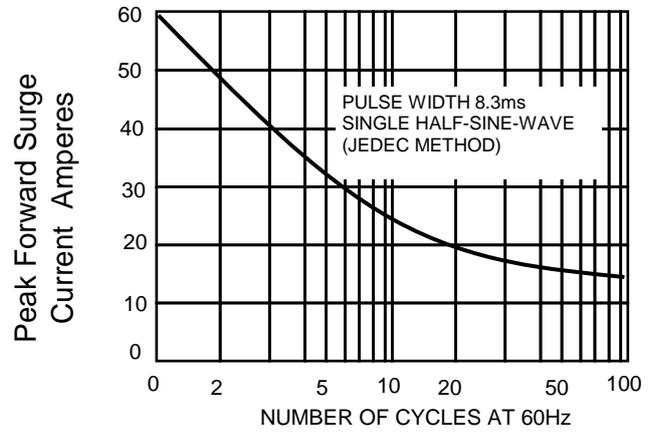


FIG.3-TYPICAL JUNCTION CAPACITANCE

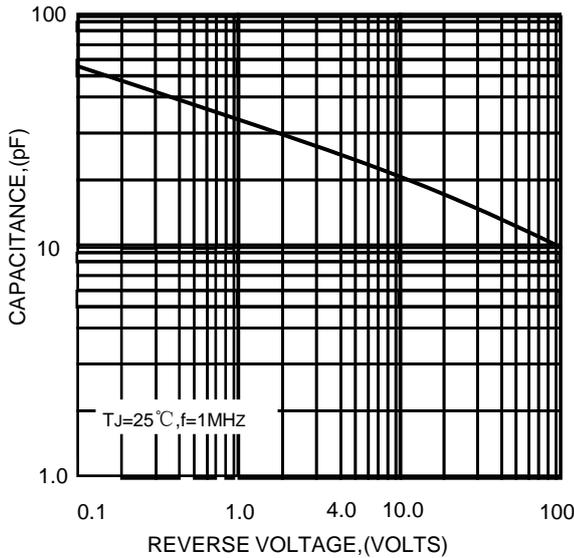


FIG.4-TYPICAL FORWARD CHARACTERISTICS

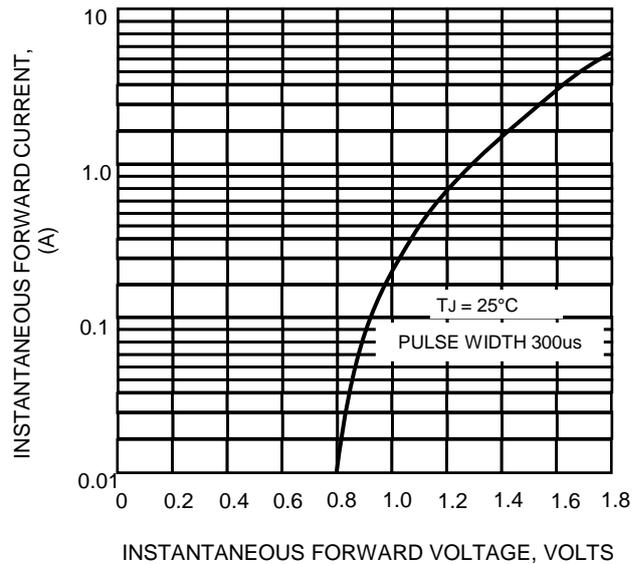
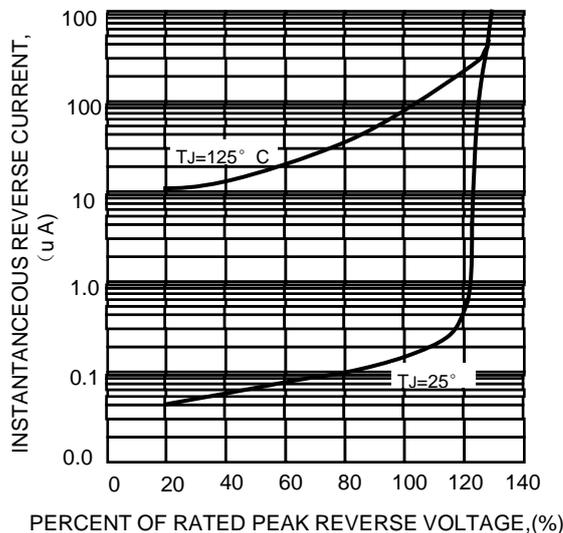


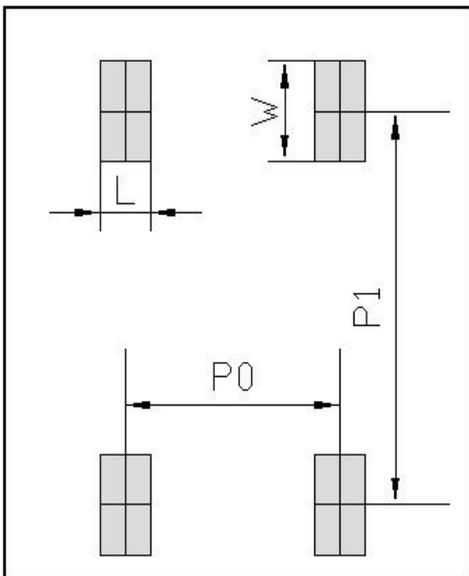
FIG.5-TYPICAL REVERSE CHARACTERISTICS



Ordering Information(Example)

PREFFREN P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FDB201S~FDB207S	Approximate 0.30	50	5000	20000	TUBE
FDB201S~FDB207S	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