DB151S(DF15005S) THRU DB157S(DF1510S)

SEMICONDUCTOR

SURFACE MOUNT
GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage: 50 to 1000 Volts
Forward Current: 1.0 Amps

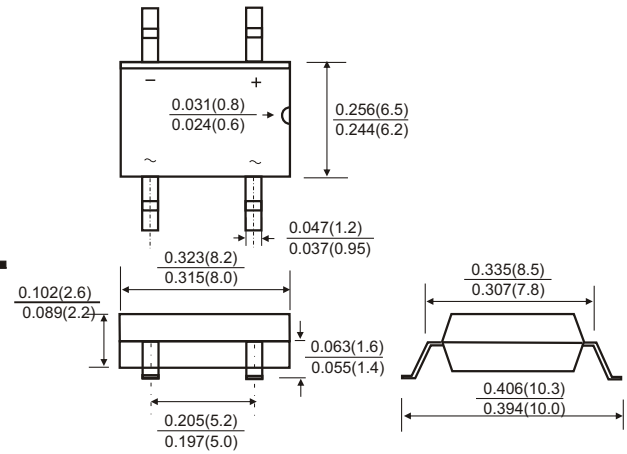
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Rating to 1000V PRV
- Ideal for printed circuit board
  High temperature soldering guaranteed:260°C/10 seconds at terminals
  Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- *Case*: DBS molded plastic body
- *Epoxy:* UL94V-0 rate flame retardant
- *Terminals*: Plated leads solderable per MIL-STD-750,method 2026
- *Mounting Position*: Any
- *Weight*: 0.02ounce, 0.38 gram

DBS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase ,half wave ,60Hz,resistive or inductive load. For capacitive load,derate current by 20%.)

	Symbols	DB151S DF 15005S	DB152S DF 1501S	DB153S DF 1502S	DB154S DF 1504S	DB155S DF 1506S	DB156S DF 1508S	DB157S DF 1510S	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	1.5							Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							Amps
Maximum Instantaneous Forward Voltage at 1.5A DC	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage T_A=25°C	I_R	10							μA
Maximum DC Reverse Current at rated DC blocking voltage T_A=125°C	I_R	500							μA
Typical junction capacitance(Note1)	C_J	25							pF
Typical thermal resistence(Note 2)	$R_{\theta JA}$	40							K/W
Operating junction and storage temperature range	T_J T_{STG}	-55 to +150							°C

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0 Volts.

2. Thermal resistance junction to ambient mounted on P.C.B. With 05*0.5 inches(1.3*1.3mm) copper pads

RATINGS AND CHARACTERISTIC CURVES DB151S(DF15005S) THRU DB157S (DF1510S)

FIG.1-TYPRCAL FORWARD CURRENT DERATING CURVE

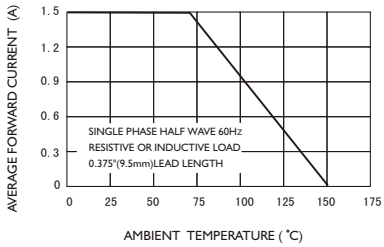


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

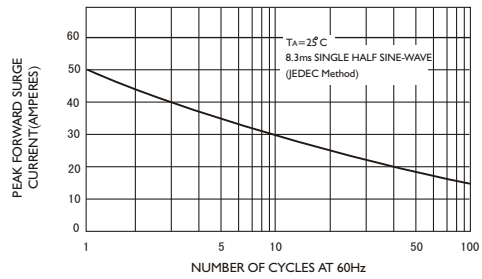


FIG3-TYPICAL JUNCTION CAPACITANCE

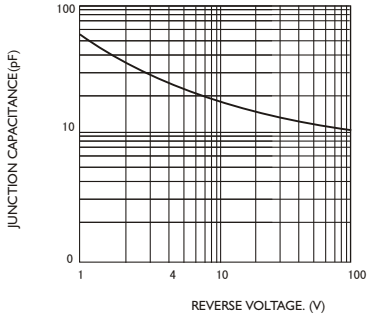


FIG4-TYPICAL FORWARD CHARACTERISTICS

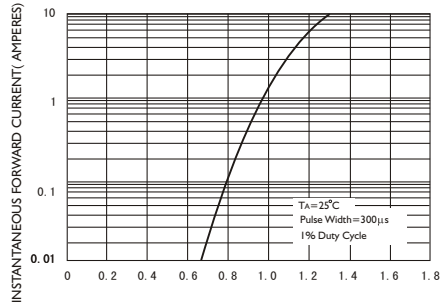


FIG.5-TYPICAL REVERSE CHARACTERISTICS