



DB151S~DB157S

SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

**Voltage Range 50 to 1000 Volts
Current 1.5 Amperes**

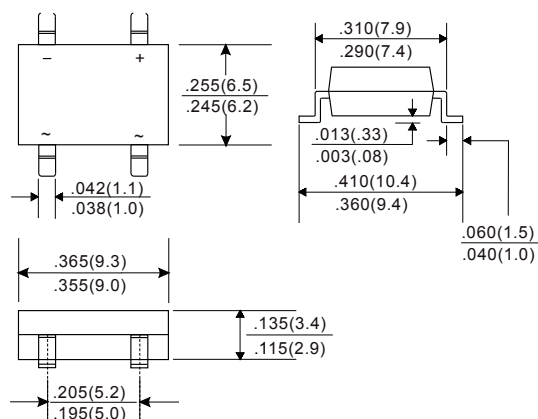
Features

- * Plastic material used carries Underwriters Laboratory recognition 94V-0
- * Low leakage
- * Surge overload rating-- 50 amperes peak
- * Ideal for printed circuit board
- * Exceeds environmental standards of MIL-S-19500/228
- * Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

Mechanical Data

Case: DB-S molded plastic technique results in inexpensive product
Terminals: Lead solderable per MIL-STD-202, Method 208
Polarity: Polarity symbols molded or marking on body
Mounting Position: Any
Weight: 0.02 ounce, 0.38 gram

SDIP



Dimensions in millimeters

Maximum Ratings and Electrical Characteristics

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

PARAMETER	SYMBOL	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	UNITS
Maximum Recurrent 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 Current TA=40°C	I _{AV}				1.5				A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}				50				A
I ² t Rating for fusing (t<8.35ms)	I ² t				10				A ² t
Maximum Forward Voltage Drop per Bridge Element at 1.0A	V _F				1.1				V
Maximum DC Reverse Current T _J =25 °C at Rated DC Blocking Voltage T _J =100 °C	I _R				5.0 500				uA
Typical Junction capacitance (Note 1)	C _J				25				pF
Typical thermal resistance per leg ((Note 2)	R _{θJA} R _{θJL}				40 15				°C / W
Operating and Storage Temperature Range	T _J				-55 to + 125				°C
Storage Temperature Range	T _A				-55 to + 150				°C

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 X 0.5"(13 X 13mm) copper pads

[Http://www.upm.com.tw](http://www.upm.com.tw)

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Rating and Characteristic Curves

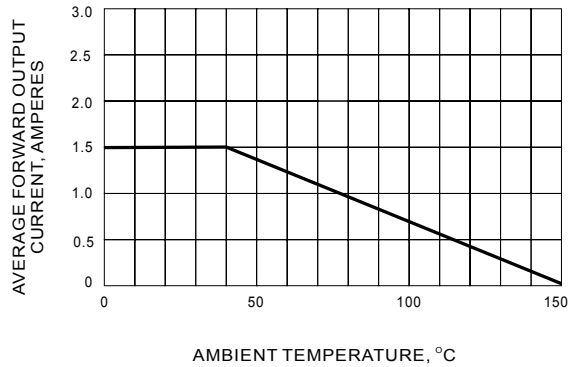


FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

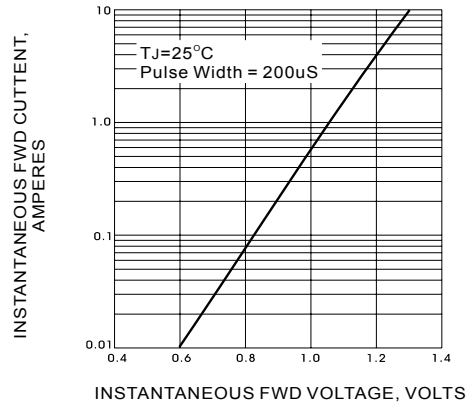


FIG.2 TYPICAL FORWARD CHARACTERISTICS

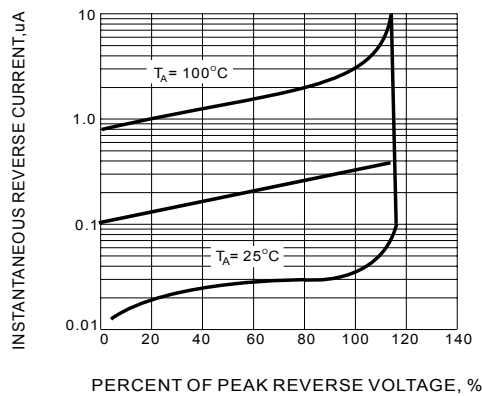


FIG.3 TYPICAL REVERSE CHARACTERISTICS

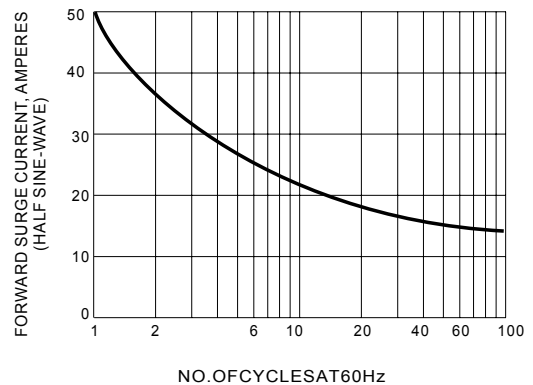


FIG.4 MAX NON-REPETITIVE SURGE CURRENT