



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

DB151S
THRU
DB157S

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 1.5 Amperes

FEATURES

- * Surge overload rating - 30 Amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction
- * Glass passivated junction

MECHANICAL DATA

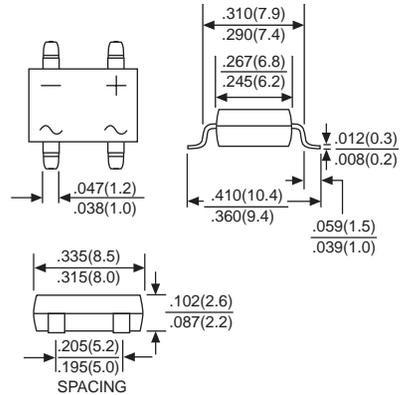
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 0.38 gram

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%.



DB-1S



Dimensions in inches and (millimeters)

	SYMBOL	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	Vdc	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at TA = 40°C	Io	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	50							Amps
Maximum Forward Voltage Drop per element at 1.5 A DC	VF	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@TA = 25°C	10							uAmps
	@TA = 125°C	500							
I ² t Rating for Fusing (t<8.3ms)	I ² t	10.4							A ² Sec
Typical Junction Capacitance (Note1)	CJ	25							pF
Typical Thermal Resistance (Note 2)	RθJA	40							°C/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150							°C

NOTES : 1. Measured at 1 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" (13x13mm) copper pads.

RATING AND CHARACTERISTIC CURVES (DB151S THRU DB157S)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

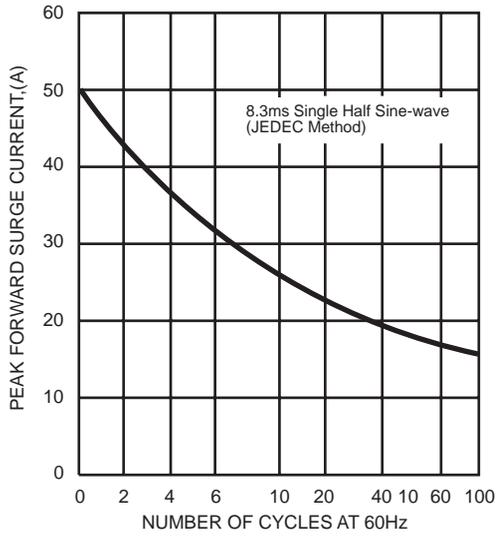


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

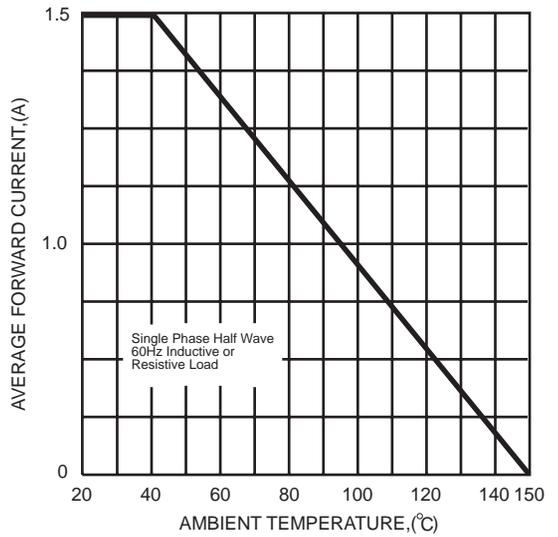


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

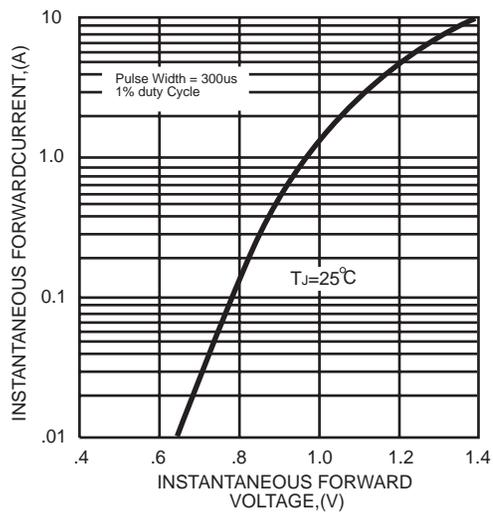
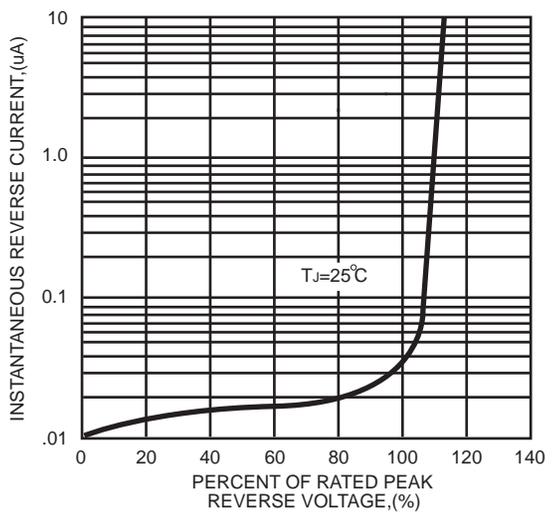


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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