



# DATA SHEET

SEMICONDUCTOR

DB151S THRU DB157S

**SINGLE-PHASE GLASS PASSIVATED**  
**VOLTAGE RANGE 50 to 1000**  
**Volts CURRENT 1.5 Ampere**



SDIP

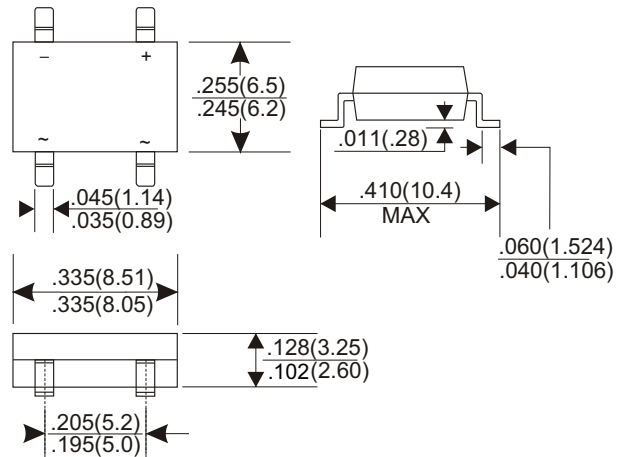
Unit : inch (mm)

## FEATURES

- Surge overload rating - 60 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded
- Glass passivated device
- Polarity symbols molded on body
- Mounting position: Any
- Weight: 1.0 gram
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

## MECHANICAL DATA

- Epoxy : Device has UL flammability classification 94V-0
- UL listed the recognized component directory, file #E94233



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

## MAXIMUM RATINGS (At TA = 25oC unless otherwise noted)

RATINGS	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	IO	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	60							Amps
Typical thermal resistance	R q J A R q J L	40 15							/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150							

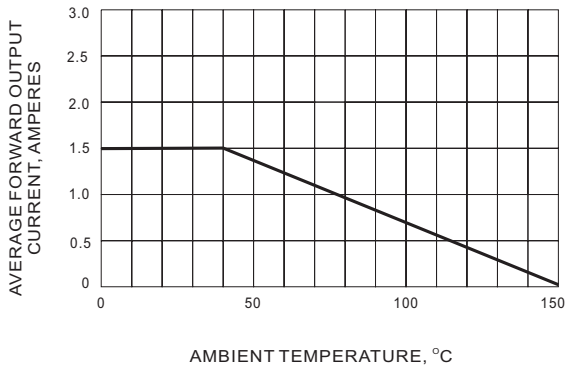
## ELECTRICAL CHARACTERISTICS (At TA = 25oC unless otherwise noted)

CHARACTERISTICS	SYMBOL	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	VF	1.1							Volts
Maximum Forward Voltage Drop per Bridge	@TA = 25	5.0							uAmps
	@TA = 125	0.5							uAmps
DC Blocking Voltage per element	IR	0.5							uAmps

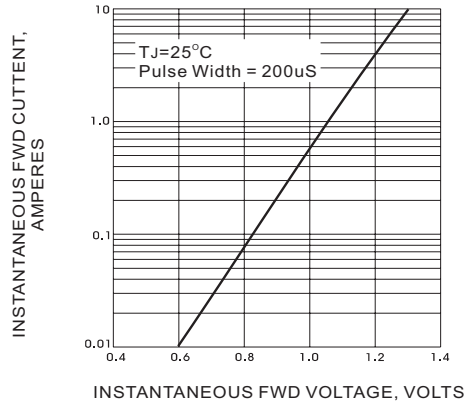
NOTE: Suffix "-s" Surface Mount for Dip Bridge.

# DEVICE CHARACTERISTICS

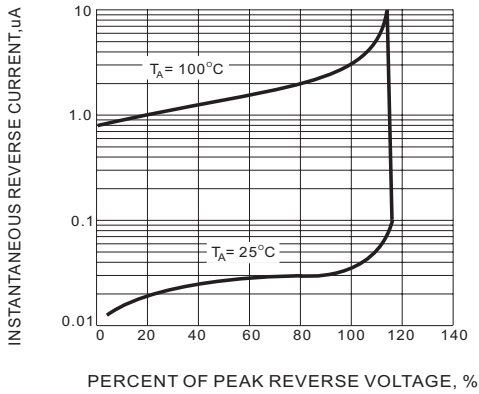
## DB151S THRU DB157S



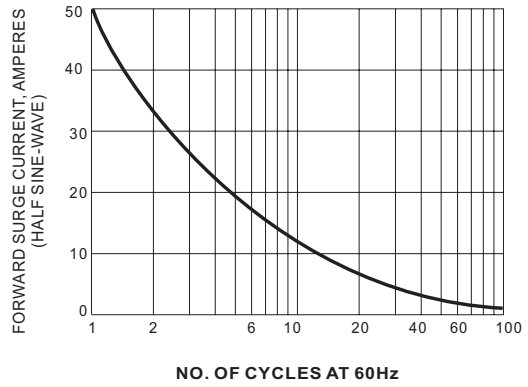
**FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 TYPICAL FORWARD CHARACTERISTICS**



**FIG.3 TYPICAL REVERSE CHARACTERISTICS**



**FIG.4 MAX NON-REPETITIVE SURGE CURRENT**