DATA SHEET

SEMICONDUCTOR

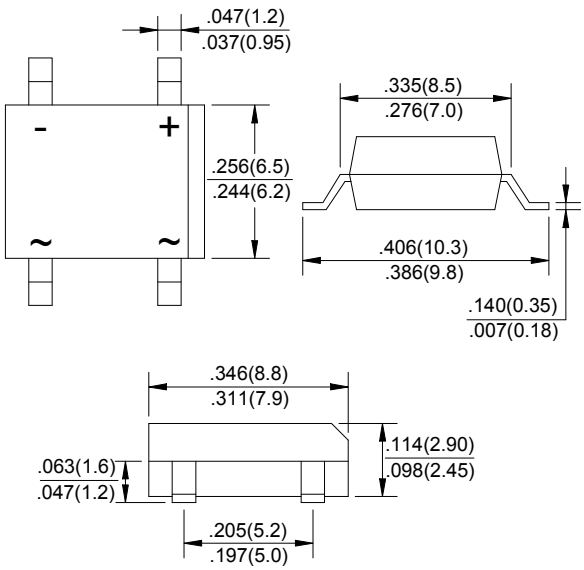
DB151S THRU DB157S

SINGLE PHASE 1.5 AMP BRIDGE RECTIFIERS
VOLTAGE RANGE 50 to 1000 Volts
CURRENT 1.5 Ampere Glass passivated type

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound.
- For surface mounted applications.
- Exceeds environmental standards of MIL-S-19500 /228
- High surge current capability
- Ideal for printed circuit board
- High temperature soldering : 260^{O}C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

SDIP Unit : inch (mm)



Mechanical data

- Case : Molded plastic, DFS
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Marked on body
- Mounting Position : Any

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	50							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							℃
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC		VF	1.1							Volts
Maximum Forward Voltage Drop per Bridge	**@TA = 25℃**	IR	5.0							uAmps
DC Blocking Voltage per element	**@TA = 125℃**		0.5							uAmps

NOTE: Suffix “-s” Surface Mount for Dip Bridge.

DEVICE CHARACTERISTICS

DB151S THRU DB157S

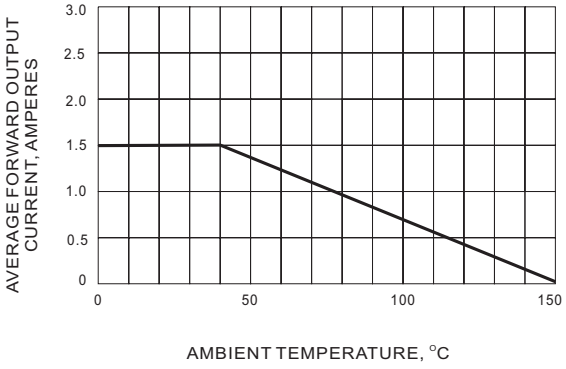


FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

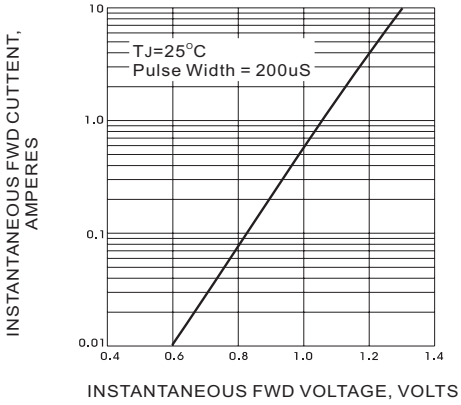


FIG.2 TYPICAL FORWARD CHARACTERISTICS

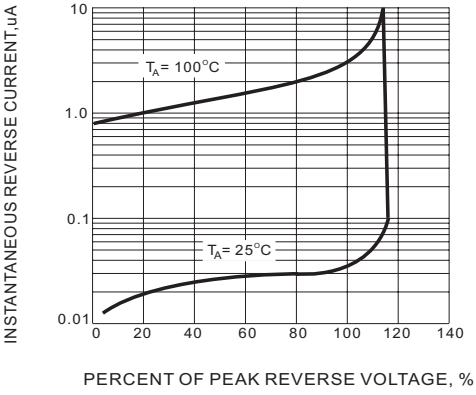


FIG.3 TYPICAL REVERSE CHARACTERISTICS

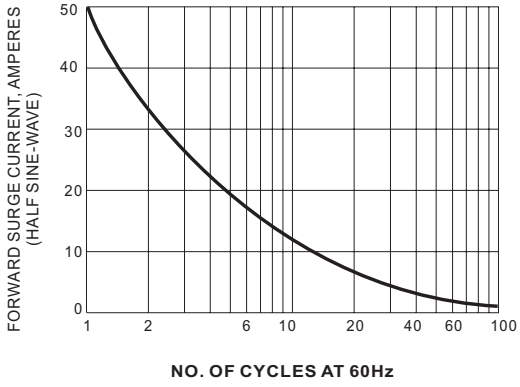


FIG.4 MAX NON-REPETITIVE SURGE CURRENT