



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**DB201S
THRU
DB207S**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 2.0 Amperes

FEATURES

- * Surge overload rating - 60 Amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction
- * Glass passivated junction

MECHANICAL DATA

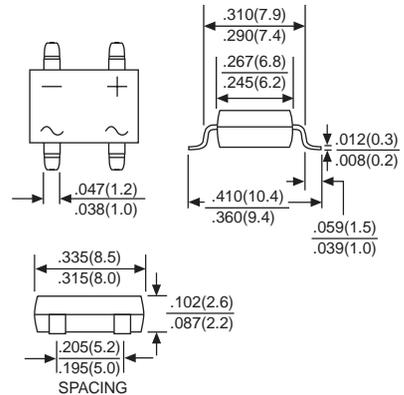
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 0.38 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



DB-1S



Dimensions in inches and (millimeters)

	SYMBOL	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current at T _A = 40°C	I _O	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	60							Amps
Maximum Forward Voltage Drop per Bridge Element at 2.0A DC	V _F	1.1							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	@ T _A = 25°C	10							uAmps
	@ T _A = 125°C	500							
I ² T RATING FOR FUSING(T<8.3ms)	I ² T	14.94							A ² Sec
Typical Junction Capacitance (Note 1)	C _J	25							pF
Typical Thermal Resistance (Note 2)	R _{θJC}	40							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-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 (DB201S THRU DB207S)

FIG. 1
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

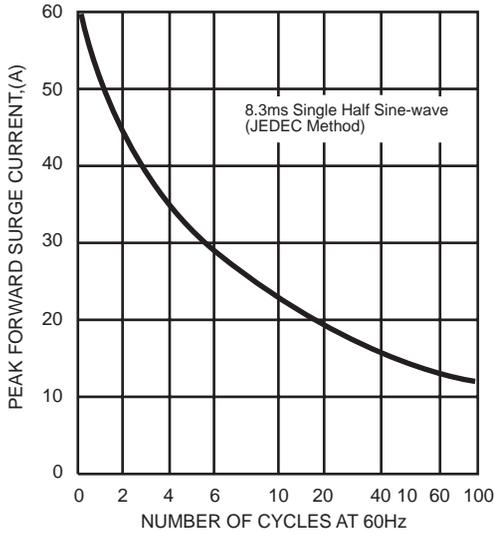


FIG. 2
TYPICAL FORWARD CURRENT DERATING CURVE

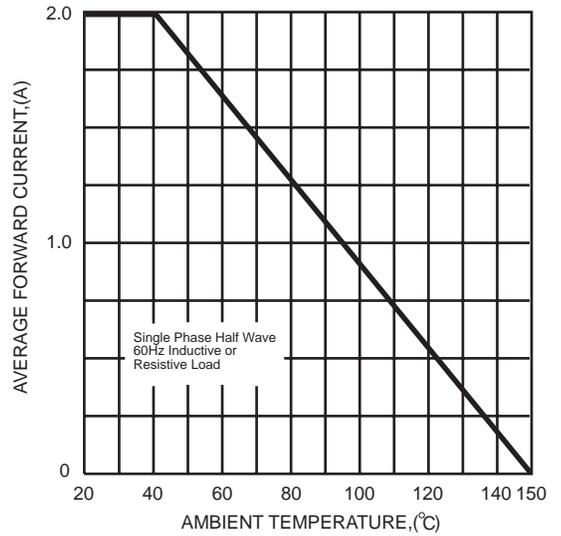


FIG. 3
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

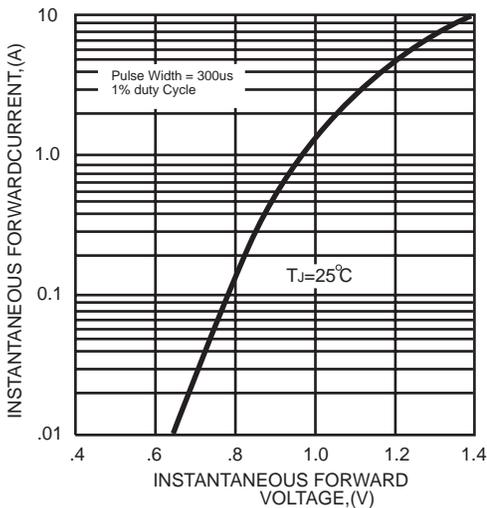
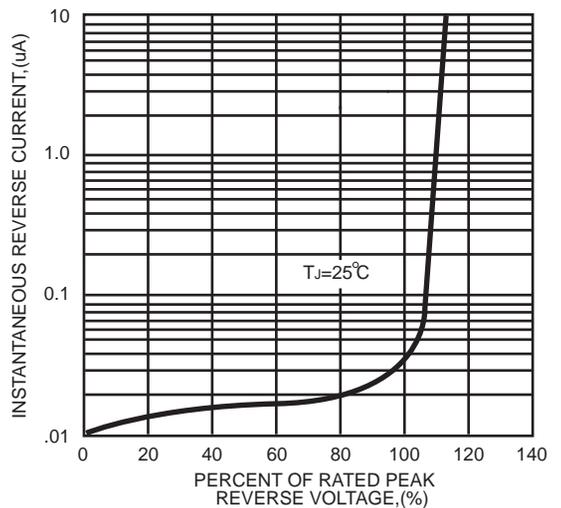


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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