



# CHENMKO ENTERPRISE CO.,LTD

## SINGLE-PHASE GLASS PASSIVATED

SILICON SURFACE MOUNT BRIDGE RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 1.0 Ampere

DB101-SPT

THRU

DB107-SPT

Lead free devices

### FEATURES

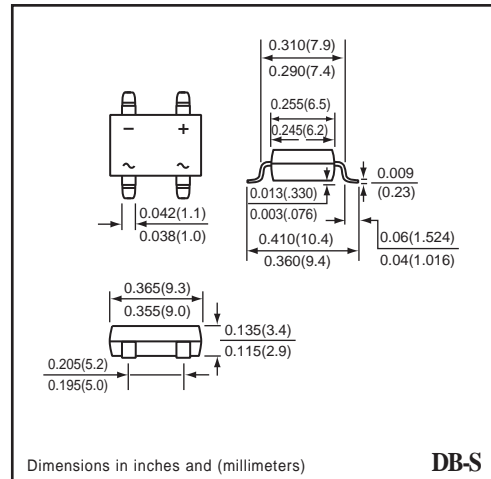
- \* Reliable low cost construction utilizing molded
- \* Surge overload rating of 50 Amperes peak
- \* Glass passivated device
- \* Ideal for printed circuit board
- \* Polarity symbols molded on body

### MECHANICAL DATA

**Case:** JEDEC DB-S molded plastic  
**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026  
**Mounting position:** Any  
**Polarity:** Indicated by cathode band  
**Weight:** 1.0 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%.



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

RATINGS	SYMBOL	DB101-SPT	DB102-SPT	DB103-SPT	DB104-SPT	DB105-SPT	DB106-SPT	DB107-SPT	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current TA = 40°C	I <sub>O</sub>	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	50							Amps
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150							°C

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

CHARACTERISTICS	SYMBOL	DB101-SPT	DB102-SPT	DB103-SPT	DB104-SPT	DB105-SPT	DB106-SPT	DB107-SPT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	V <sub>F</sub>	1.1							Volts
Maximum Reverse Current at rated	I <sub>R</sub>	5.0							uAmps
DC blocking Voltage per element		0.5							mAmps

NOTES : Suffix " -S " Surface Mount for Dip Bridge.

## RATING CHARACTERISTIC CURVES ( DB101-SPT THRU DB107-SPT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

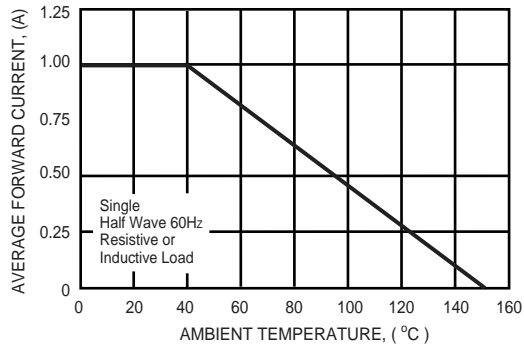


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

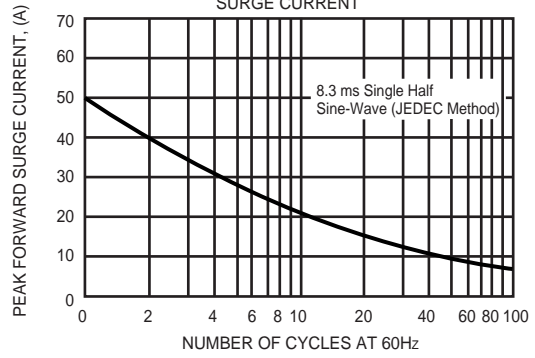


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

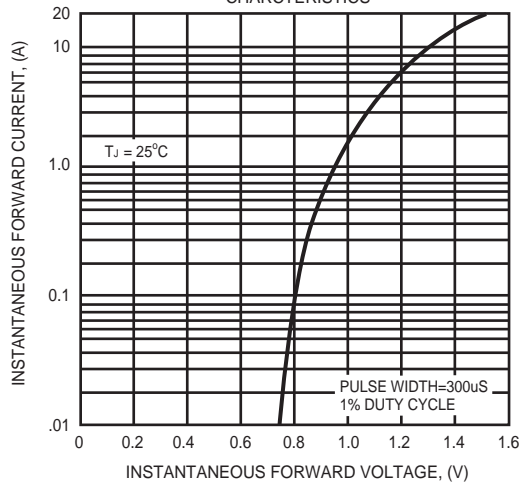


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

