



### FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.093 grams

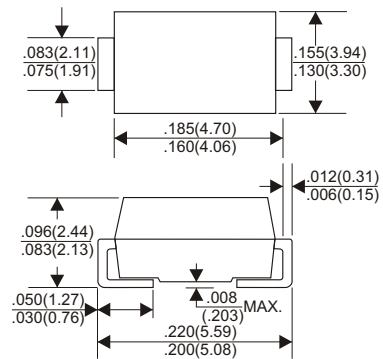
### VOLTAGE RANGE

100 Volts

### CURRENT

5.0 Amperes

#### DO-214AA(SMB)



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SL 510	UNITS
Maximum Recurrent Peak Reverse Voltage	100	V
Maximum RMS Voltage	70	V
Maximum DC Blocking Voltage	100	V
Maximum Average Forward Rectified Current		
See Fig. 1	5.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120	A
Maximum Instantaneous Forward Voltage at 5.0A	0.6	V
Maximum DC Reverse Current Ta=25 °C	0.1	mA
at Rated DC Blocking Voltage Ta=125 °C	20	mA
Typical Junction Capacitance (Note1)	370	pF
Typical Thermal Resistance R JA (Note 2)	70	°C/W
Operating Temperature Range Tj	-55 — +150	°C
Storage Temperature Range Tstg	-55 — +150	°C

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Unit mounted on PC board with 5.0mm× 5.0 mm (0.013 mm thick) copper pads as heat sink

## RATING AND VCHARACTERISTIC CURVES(SL510)

FIG.1-FORWARD CURRENT DERATING CURVE

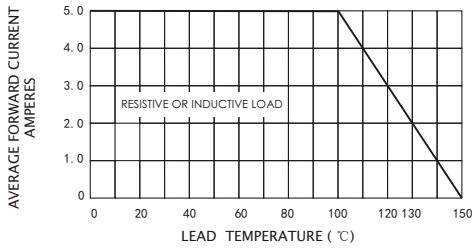


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

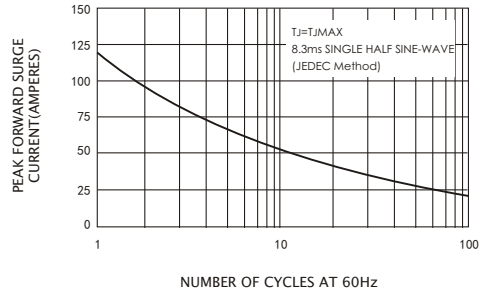


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

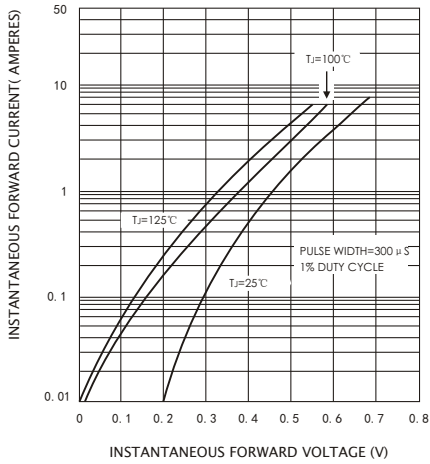


FIG.4-TYPICAL REVERSE CHARACTERISTICS

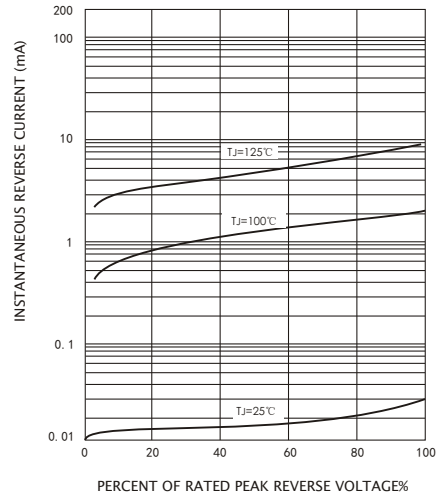


FIG.5-TYPICAL JUNCTION CAPACITANCE

