





### **FEATURES**

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

## **MECHANICAL DATA**

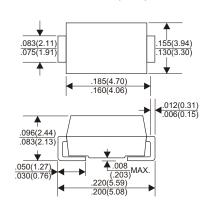
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.093 grams

# VOLTAGE RANGE 80 Volts

### **CURRENT**

5.0 Amperes

### DO-214AA(SMB)



Dimensions in inches and (millimeters)

# MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25  $^{\circ}$ C ambient temperature unless otherwies specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

TYPE NUMBER		SL58	UNITS
Maximum Recurrent Peak Reverse Voltage		80	V
Maximum RMS Voltage		56	V
Maximum DC Blocking Voltage		80	V
Maximum Average Forward Rectified C	urrent		
See Fig. 1		5.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave		120	
superimposed on rated load (JEDEC method)			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 T <sub>J</sub>		-55 <b>—</b> + 125	°C
Storage Temperature Range Tsrg		-55 <b>−</b> + 125	°C

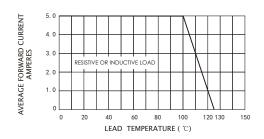
#### NOTES

- 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

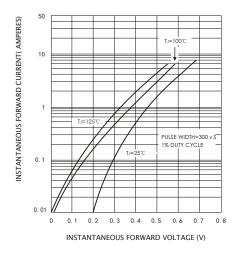
REV 1.0 2017 JAN PAGE:1/2

## RATING AND VHARACTERISTIC CURVES(SL58)

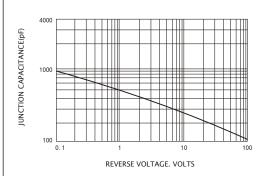
#### FIG.1-FORWARD CURRENT DERATING CURVE



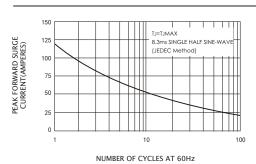
# FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



### FIG.5-TYPICAL JUNCTION CAPACITANCE



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



#### FIG.4-TYPICAL REVERSE CHARACTERISTICS

