

# PRLL4001A - PRLL4002A

# SURFACE MOUNT GLASS PASSIVATED JUNCTION

**PRV : 50 - 100 Volts**

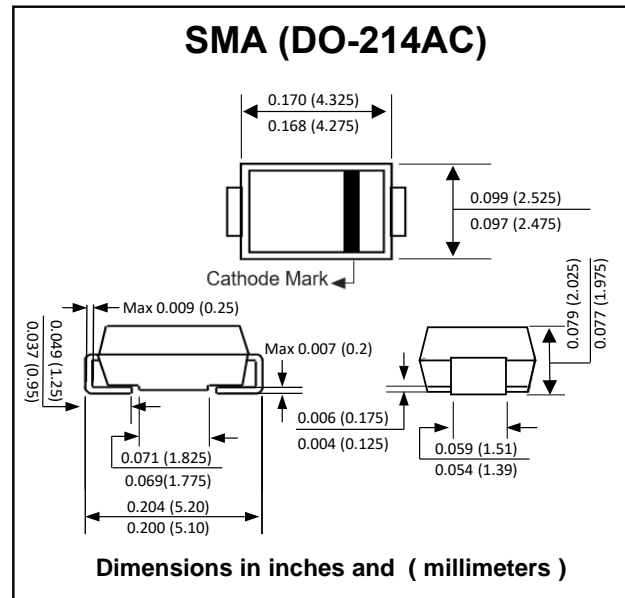
**Io : 1.6 Ampere**

### FEATURES :

- \* Glass passivated junction chip
- \* High maximum operating temperature
- \* Low leakage current
- \* Excellent stability
- \* Smallest surface mount rectifier outline
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : SMA Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Lead Formed for Surface Mount
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.067 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

RATING	SYMBOL	PRLL4001A	PRLL4002A	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	V
Maximum Continuous Reverse Voltage	$V_R$	50	100	V
Maximum Average Forward Current	$I_{F(AV)}$	1.60 <sup>(1)</sup>		A
		0.68 <sup>(2)</sup>		
Maximum Non-Repetitive Peak Forward Surge Current ( Half sine wave; 60 Hz)	$I_{FSM}$	20		A
Maximum Repetitive Peak Forward Current	$I_{FRM}$	10		A
Maximum Forward Voltage at $I_F = 1.0 A, T_J = 25\text{ }^\circ\text{C}$	$V_F$	1.1		V
Maximum Reverse Current at $V_R = V_{RRMmax}$ $T_J = 25\text{ }^\circ\text{C}$ $T_J = 100\text{ }^\circ\text{C}$	$I_R$	10		$\mu\text{A}$
	$I_{R(H)}$	50		$\mu\text{A}$
Thermal Resistance from Junction to Tie-Point	$R_{th\ j-tp}$	30		K / W
Thermal Resistance from Junction to Ambient (Note 3)	$R_{th\ j-a}$	150		K / W
Junction Temperature Range	$T_J$	-65 to +175		$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to +175		$^\circ\text{C}$

### Notes :

- (1)  $T_{tp} = 105\text{ }^\circ\text{C}$ ; averaged over any 20 ms period.
- (2)  $T_{amb} = 65\text{ }^\circ\text{C}$ ; averaged over any 20 ms period; see Fig. 1
- (3) Device mounted on an epoxy-glass printed-circuit board, 1.5 mm thick; thickness of Cu-layer  $\geq 40\text{ }\mu\text{m}$ .

RATING AND CHARACTERISTIC CURVES ( PRL4001A - PRL4002A )

FIG.1 - MAXIMUM AVERAGE FORWARD CURRENT AS A FUNCTION OF AMBIENT TEMPERATURE

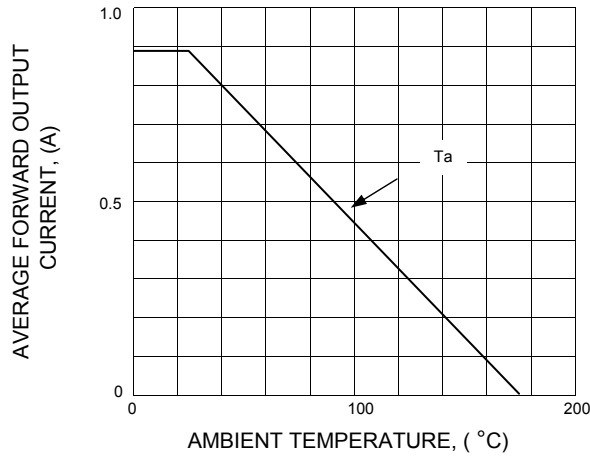


FIG.2 - FORWARD CURRENT AS S FUNCTION OF FORWARD VOLTAGE; TYPICAL VALUES

