

# PRLL4001 - PRLL4002

## SURFACE MOUNT GLASS PASSIVATED JUNCTION

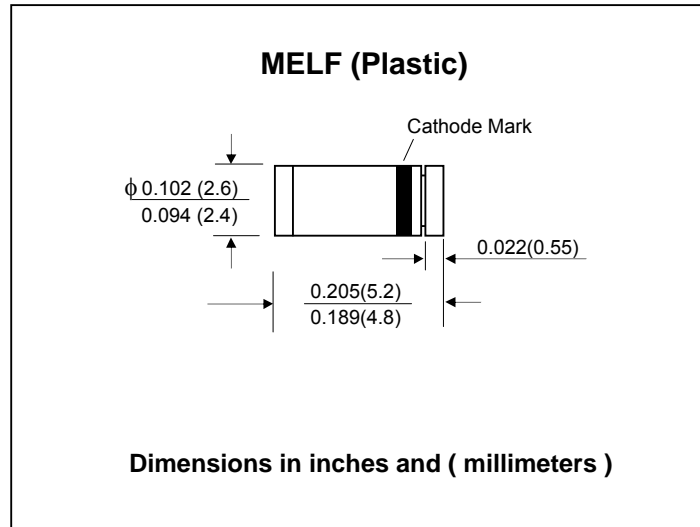
**PRV : 50 - 100 Volts**  
**I<sub>o</sub> : 1.6 Ampere**

**FEATURES :**

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

**MECHANICAL DATA :**

- \* Case : Molded plastic
- \* Terminals : Plated Terminals, solderable per MIL-STD-750 Method 2026
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.116 gram



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25 °C ambient temperature unless otherwise specified

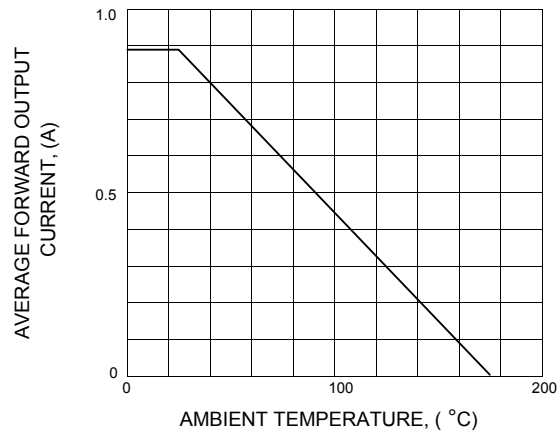
RATING	SYMBOL	PRLL4001	PRLL4002	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	V
Maximum Continuous Reverse Voltage	V <sub>R</sub>	50	100	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	1.60 <sup>(1)</sup>		A
		0.68 <sup>(2)</sup>		
Maximum Non-Repetitive Peak Forward Surge Current ( Half sine wave; 60 Hz)	I <sub>FSM</sub>	20		A
Maximum Repetitive Peak Forward Current	I <sub>FRM</sub>	10		A
Maximum Forward Voltage at I <sub>F</sub> = 1.0 A, T <sub>J</sub> = 25 °C	V <sub>F</sub>	1.1		V
Maximum Reverse Current at V <sub>R</sub> = V <sub>RRMmax</sub> T <sub>J</sub> = 25 °C T <sub>J</sub> = 100 °C	I <sub>R</sub>	10		μA
	I <sub>R(H)</sub>	50		μA
Thermal Resistance from Junction to Tie-Point	R <sub>th j-tp</sub>	30		K / W
Thermal Resistance from Junction to Ambient (Note 3)	R <sub>th j-a</sub>	150		K / W
Junction Temperature Range	T <sub>J</sub>	-65 to +175		°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +175		°C

**Notes :**

- (1) T<sub>tp</sub> = 105 °C; averaged over any 20 ms period; see Fig. 1
- (2) T<sub>amb</sub> = 65 °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 ≥ 40 μm.

**RATING AND CHARACTERISTIC CURVES ( PRL4001 - PRL4002 )**

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



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

