PRLL4001 - PRLL4002

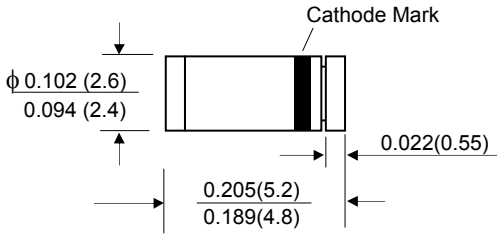
SURFACE MOUNT
GLASS PASSIVATED JUNCTION

PRV : 50 - 100 Volts
Io : 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

MELF (Plastic)



Dimensions in inches and (millimeters)

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_{RRM}	50	100	V
Maximum Continuous Reverse Voltage	V_R	50	100	V
Maximum Average Forward Current	$I_{F(AV)}$	1.60 (1)		A
		0.68 (2)		
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 °C	V_F	1.1		V
Maximum Reverse Current at $V_R = V_{RRMmax}$ T_J = 25 °C	I_R	10		µA
T_J = 100 °C	$I_{R(H)}$	50		µA
Thermal Resistance from Junction to Tie-Point	$R_{th\ j\text{-}tp}$	30		K / W
Thermal Resistance from Junction to Ambient (Note 3)	$R_{th\ j\text{-}a}$	150		K / W
Junction Temperature Range	T_J	-65 to +175		°C
Storage Temperature Range	T_{STG}	-65 to +175		°C

Notes :

(1) Ttp = 105 °C; averaged over any 20 ms period; see Fig. 1

(2) Tamb = 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 (PRLL4001 - PRLL4002)

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

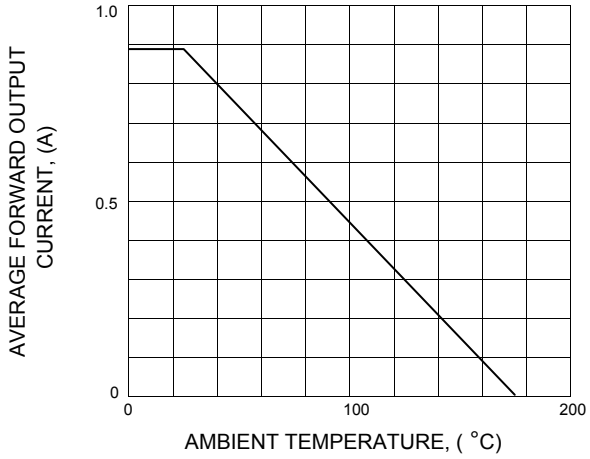


FIG.2 - FORWARD CURRENT AS S FUNCTION OF FORWARD VOLTAGE; TYPICAL VALUES

