



PJLEDSX225

RECTIFICATION FUNCTION IN FLYBACK CONVERTER FOR LED POWER

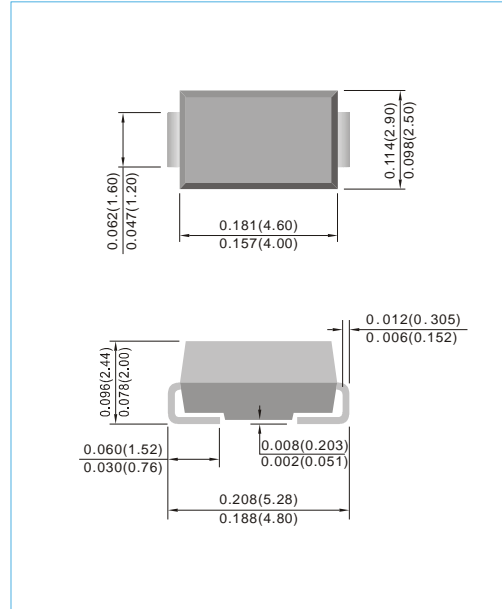
VOLTAGE 250 Volts **CURRENT** 2 Amperes **SMA / DO-214AC** Unit : inch (mm)

FEATURES

- Ideal for rectification function in flyback converter for LED power.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- For surface mounted applications in order to optimize board space.
- Low power loss, high efficiency.
- High surge capacity.
- Extremely low leakage current, suitable for high temperature ambience.
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case : JEDEC DO-214AC molded plastic
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Standard packaging : 16mm tape (EIA-481)
- Weight : 0.0023 ounce, 0.0679 gram
- Marking : LEDSX225



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	250	V
Maximum RMS Voltage	V_{RMS}	175	V
Maximum DC Blocking Voltage	V_{DC}	250	V
Maximum Average Forward Current	$I_{F(AV)}$	2	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50	A
Maximum Forward Voltage at 2A	V_F	0.93	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.2	μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	30	ns
Typical Junction capacitance (Note 2)	C_J	30	pF
Typical Junction capacitance (Note 3) (Note 4)	$R_{\theta J L}$ $R_{\theta J A}$	30 150	$^{\circ}C/W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^{\circ}C$

NOTES: 1. Reverse Recovery Test Conditions: $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$
 2. Measured at 1 MHz and applied $V_r = 4$ volts.
 3. Mounted on an FR4 PCB, single-sided copper, with 100cm² copper pad area
 4. Mounted on an FR4 PCB, single-sided copper, mini pad.



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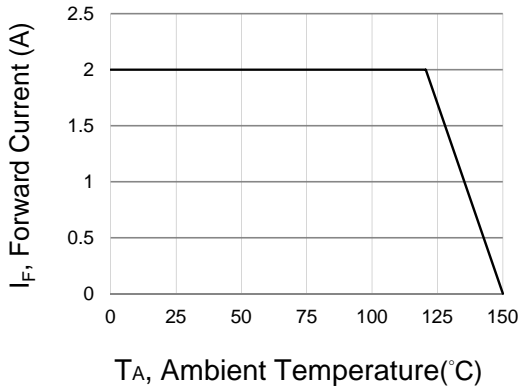


Fig.1 Forward Current Derating Curve

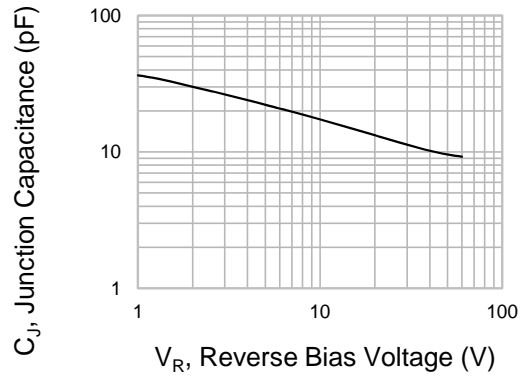


Fig.2 Typical Junction Capacitance

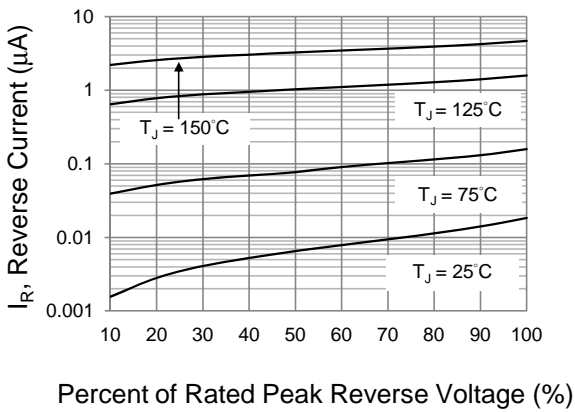


Fig.3 Typical Reverse Characteristics

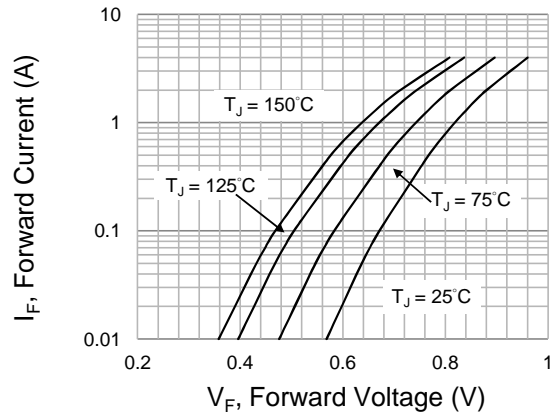


Fig.4 Typical Forward Characteristics



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