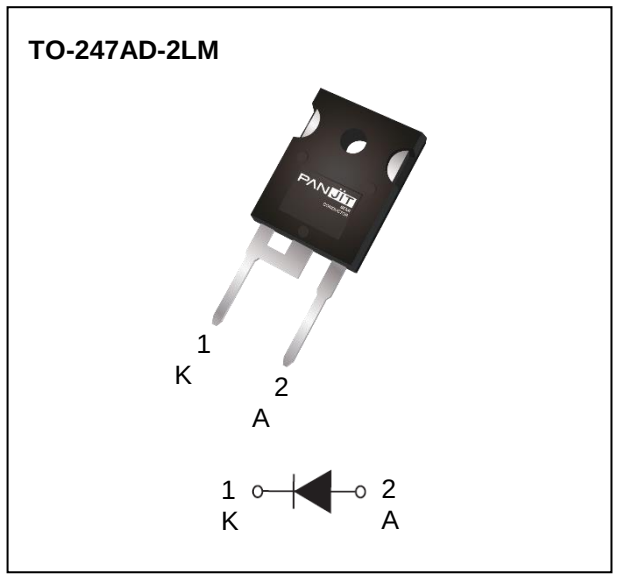
PGR6016PT

General Purpose Rectifier

Voltage	1600 V	Current	60 A



Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 265°C max.10 s, per JESD 22-B106
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Typical Applications

- For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

Mechanical Data

- Case: TO-247AD-2LM Package
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color Band denotes cathode end
- Approx. Weight: 5.69grams

Maximum Ratings (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1600	V
Maximum RMS Voltage	V_{RMS}	1120	V
Maximum DC Blocking Voltage	V_{DC}	1600	V
Average Forward Current @Half-Sine Wave, Resistance Load With Heatsink T_C=90 °C	I_O	60	A
Average Forward Current @Half-Sine Wave, Resistance Load With Heatsink T_C=25 °C		15	A
Forward Surge Current (Non-repetitive) @50HZ sine wave,1cycle,T_A=25 °C	I_{FSM}	800	A
Current Squared Time @1ms≤t10≤ms T_A=25 °C，Rating Of Per Diode	I^2t	3200	A^2S
Typical Thermal Resistance	$R_{\theta JC}$	0.35	°C/W
Operating And Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

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Electrical Characteristics (T_A = 25 °C unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITION	LIMIT	UNIT
Peak Forward Voltage	V_{FM}	I_F=60A	1.2	V
Peak Reverse Current	I_{RRM}	$V_R=V_{DC}$ @T_A=25 °C	5	μA
		$V_R=V_{DC}$ @T_A=125 °C	500	μA
Mounting torque	-	min	6	kgf.cm
		max	12	

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TYPICAL CHARACTERISTIC CURVES

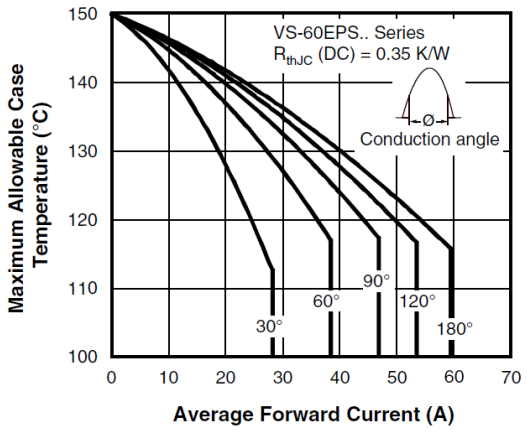

Fig.1 Current Rating Characteristics

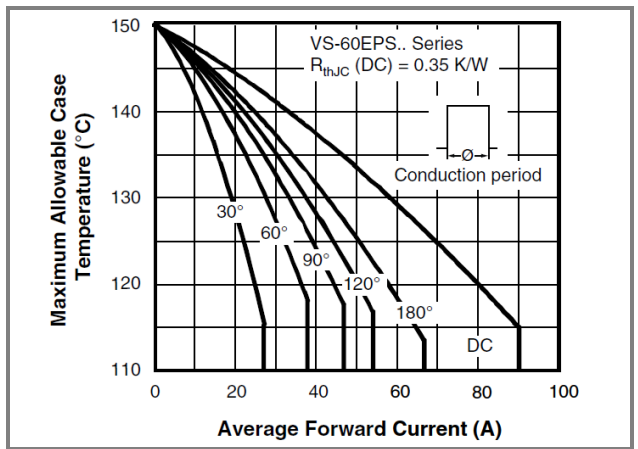

Fig.2 Current Rating Characteristics

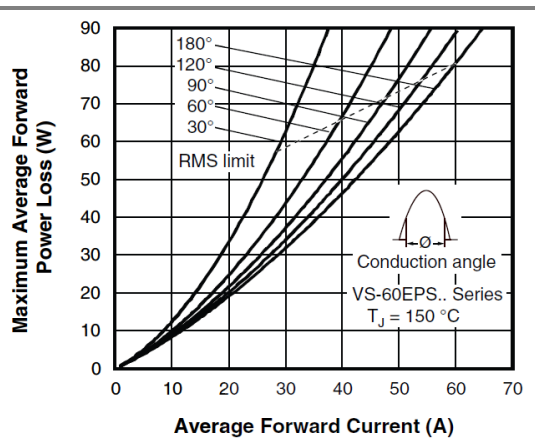

Fig.3 Forward Power Loss Characteristics

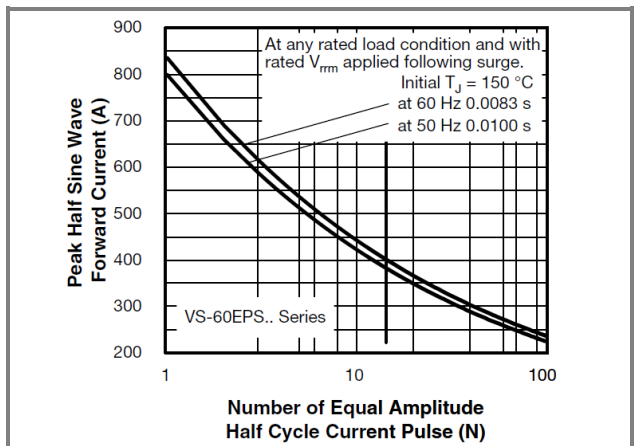

Fig.4 Maximum Non-Repetitive Surge Current

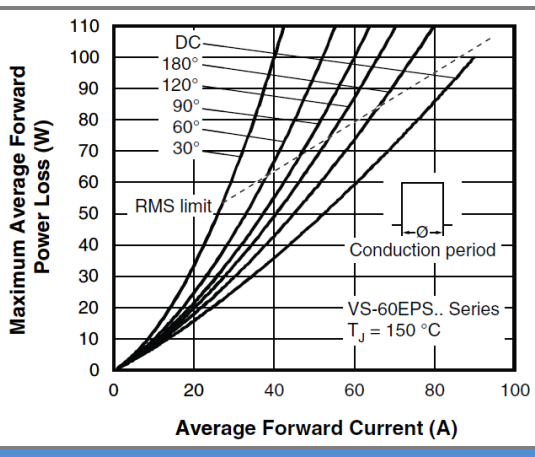

Fig.5 Forward Power Loss Characteristics

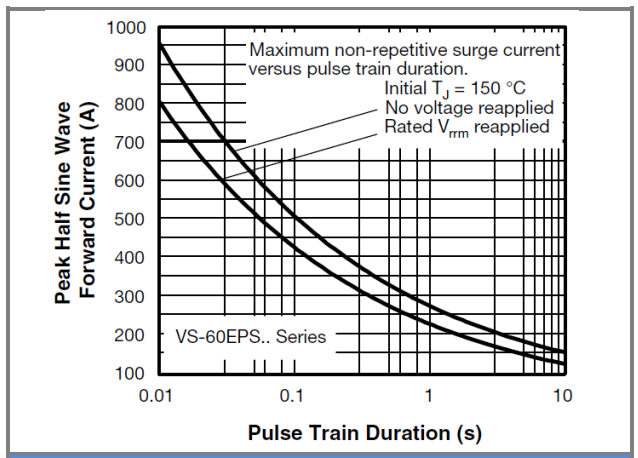

Fig.6 Maximum Non-Repetitive Surge Current

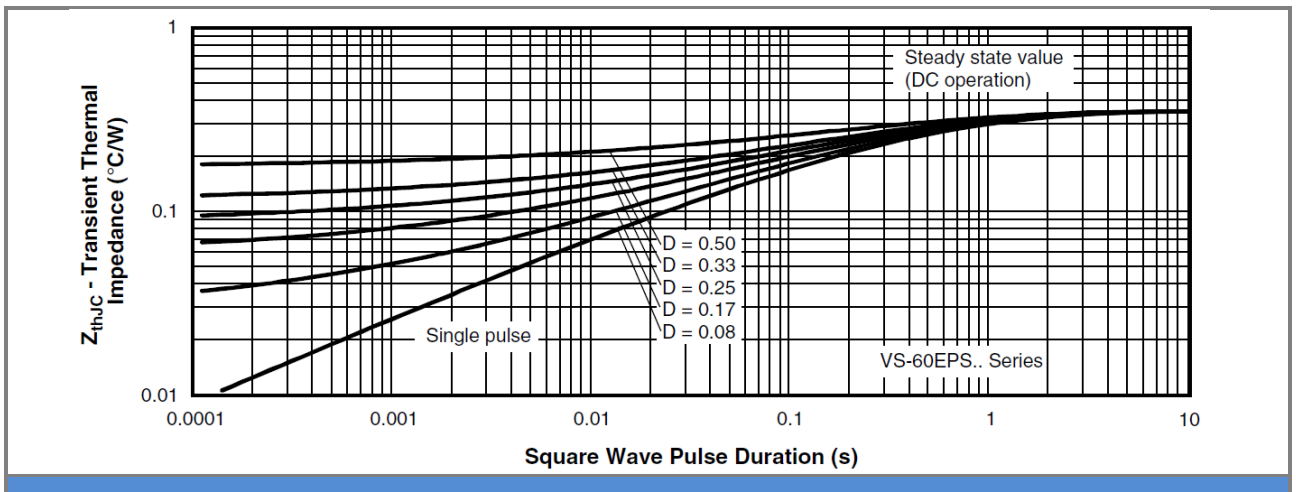

Fig.7 Thermal Impedance ZthJC Characteristics

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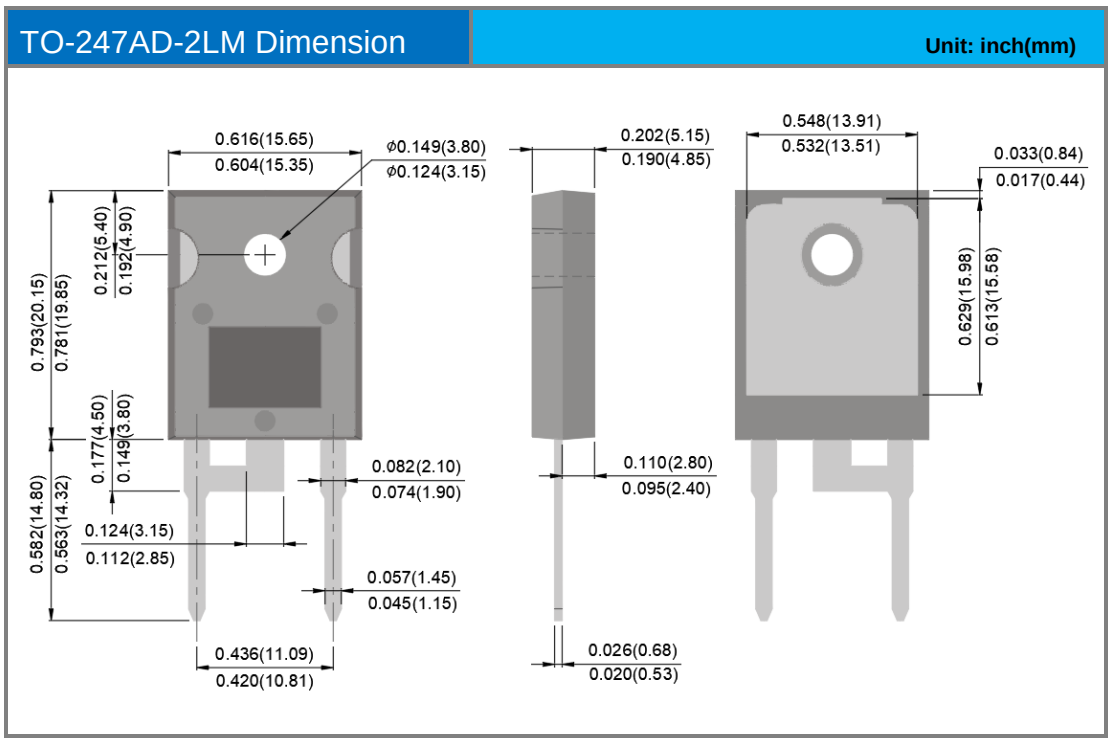
Product and Packing Information

Part No.	Package Type	Packing Type	Marking
PGR6016PT	TO-247AD-2LM	30 pcs / Tube	PGR6016PT

Packaging Information



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