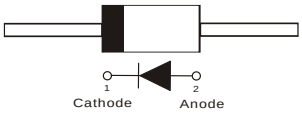
PS3010RG

FAST SWITCHING PLASTIC RECTIFIER

Voltage	1000 V	Current	3 A

DO-201AD



Features

- High current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Low leakage
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: DO-201AD Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.037 ounces, 1.057 grams

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

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum Rms Voltage	V_{RMS}	700	V
Maximum Dc Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	3	A
Peak Forward Surge Current: 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I_{FSM}	150	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V_R = 4V	C_J	29	pF
Typical Thermal Resistance	$R_{\theta JA}$ (1) $R_{\theta JC}$ (2)	42 9.2	°C/W
Operating Junction Temperature Range	T_J	-55~150	°C
Storage Temperature Range	T_{STG}	-55~150	°C

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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	I_F = 3 A, T_J = 25 °C	-	-	1.3	V
Reverse Current	I_R	V_R = 1000 V, T_J = 25 °C	-	-	1	uA
		V_R = 1000 V,T_J= 100 °C	-	-	100	
Reverse Recovery Time	T_{RR}	I_F = 0.5 A, I_R = 1 A, I_{RR} = 0.25 A, T_J = 25 °C	-	-	500	ns

NOTES:

1. The testing condition of the thermal resistance (junction to ambient) is based on 10 mm lead length between mini copper pad
2. The testing condition of the thermal resistance (junction to case) is based on 10 mm lead length between two 10 cm x 10cm copper pad

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TYPICAL CHARACTERISTIC CURVES

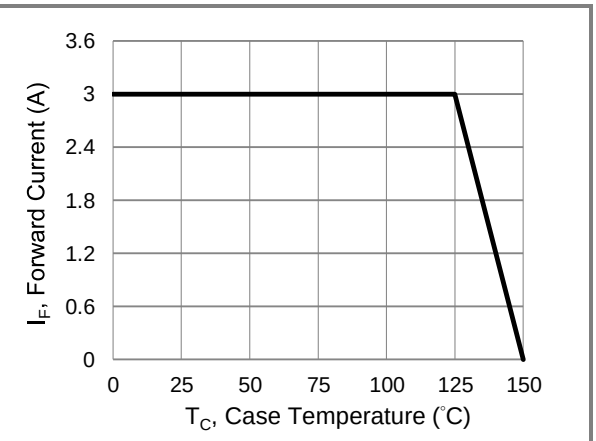

Fig.1 Forward Current Derating Curve

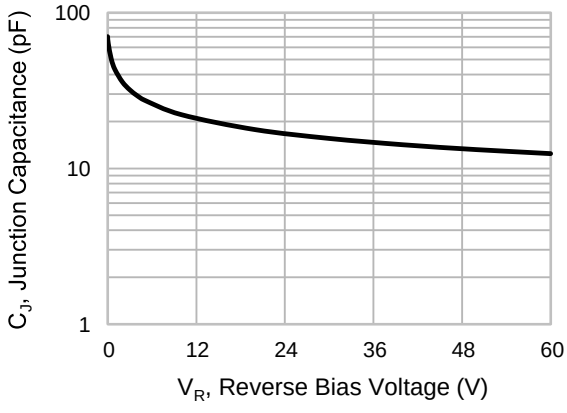

Fig.2 Typical Junction Capacitance

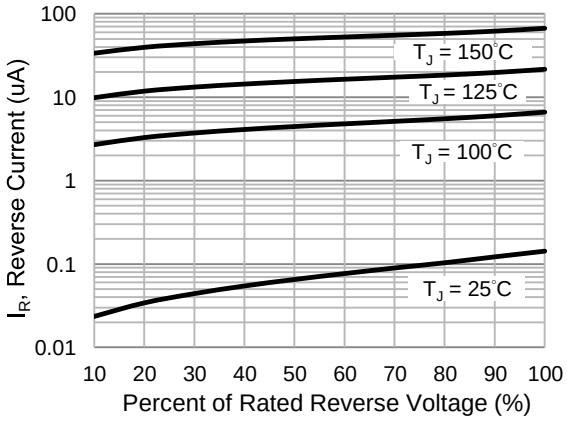

Fig.3 Typical Reverse Characteristics

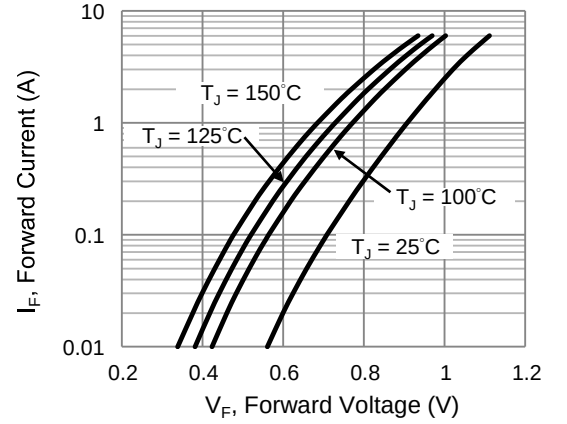

Fig.4 Typical Forward Characteristics

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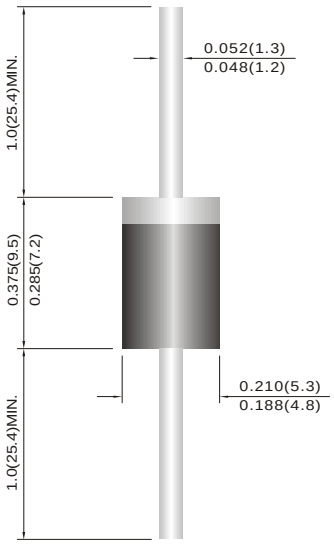
Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
PS3010RG_AY_00001	DO-201AD	1250pcs / Ammo	PS3010RG	Halogen free
PS3010RG_B0_00001	DO-201AD	500pcs / Box	PS3010RG	Halogen free
PS3010RG_R2_00001	DO-201AD	1250pcs / 13” reel	PS3010RG	Halogen free

Packaging Information

DO-201AD Dimension — Unit: inch(mm)



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