

1.0 Amp. Glass Passivated Junction Avalanche Rectifier

DO-204AL (DO-41) 	Voltage 200V to 1000 V Current 1.0 A at 55° C HYPERECTIFIER®
	FEATURES • Glass passivated chip junction • Hyperectifier structure for high reliability • Cavity-free glass-passivated junction • Low forward voltage drop • Low leakage current, typical I_R less than 0.1 μA • High forward surge capability • Solder dip 260°C, 10s • AEC-Q101 qualified • Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC MECHANICAL DATA • Case: DO-204AL (DO-41) Epoxy meets UL 94V-0 flammability rating. • Polarity: Color band denotes cathode end • Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test. TYPICAL APPLICATIONS Used in general purpose rectification of power supplies, inverters, converters and freewheeling diodes application
	RoHS COMPLIANT

Maximun Ratings and Electrical Characteristics at 25°C

		GP10DE	GP10GE	GP10JE	GP10ME
V_{RRM}	Peak Recurrent Reverse Voltage (V)	200	400	600	1000
$I_{F(AV)}$	Forward Current at $T_{amb} = 55^\circ C$	1.0 A			
I_{FRM}	Recurrent Peak Forward Current	10 A			
I_{FSM}	8.3 ms. Peak Forward Surge Current (Jedec Method)	30 A			
T_j	Operating Temperature Range	-65 to +150°C			
T_{stg}	Storage Temperature Range	-65 to +150°C			
$R_{th(j-a)}$	Thermal Resistance (l = 10mm.) Max. Typ.	60 °C/W 45 °C/W			
E_{RSM}	Maximum non Repetitive Peak Reverse Avalanche energy. $I_R(BR) = 1 A; T_j = 25^\circ C$	40 mJ			

Electrical Characteristics at $T_{amb} = 25^\circ C$

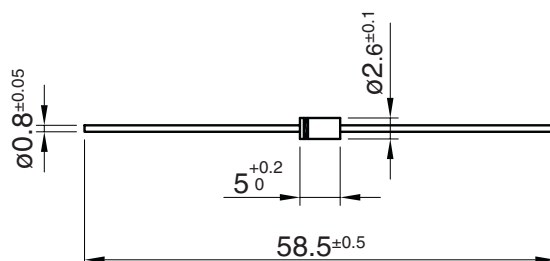
			GP10DE	GP10GE	GP10JE	GP10ME
V_{BR}	Breakdown Voltage at $I_R = 100 \mu A$	Min.	225 V	450 V	650 V	1050 V
		Max.	1400 V			
V_F	Maximum Forward Voltage Drop at $I_F = 1 A$		1.1 V			
I_R	Maximum Reverse Current at V_{RRM} at 25 °C at 125 °C		5 μA 50 μA			

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Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
GP10GE AMP	AMP	AMMO BOX	5,000	0.325
GP10GE TR	TR	14" diameter tape and reel	5,000	0.325

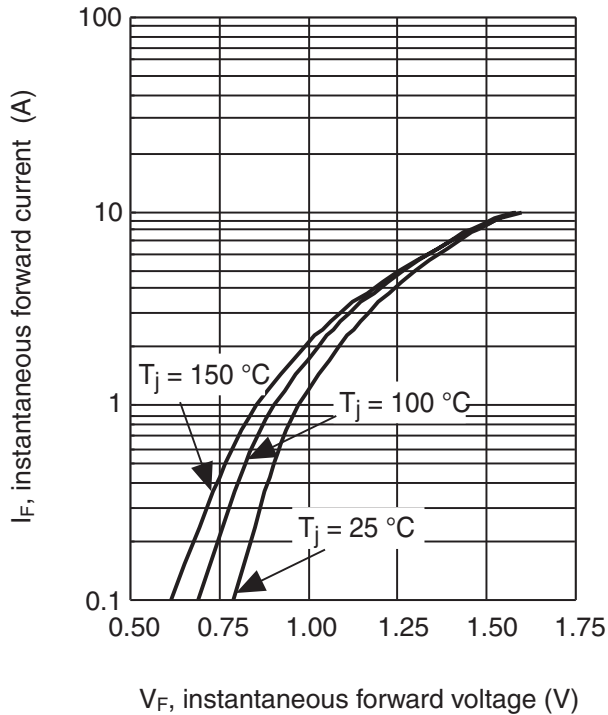
Package Outline Dimensions: (mm) DO-204AL (DO-41)



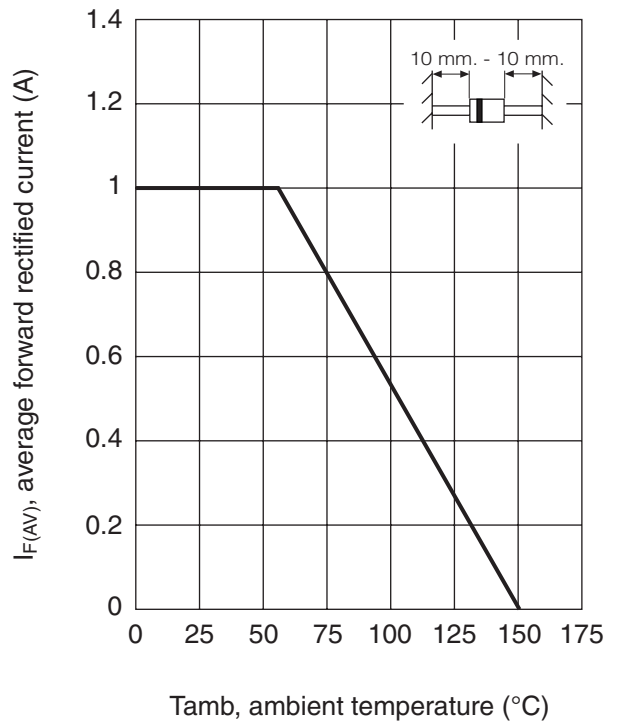
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

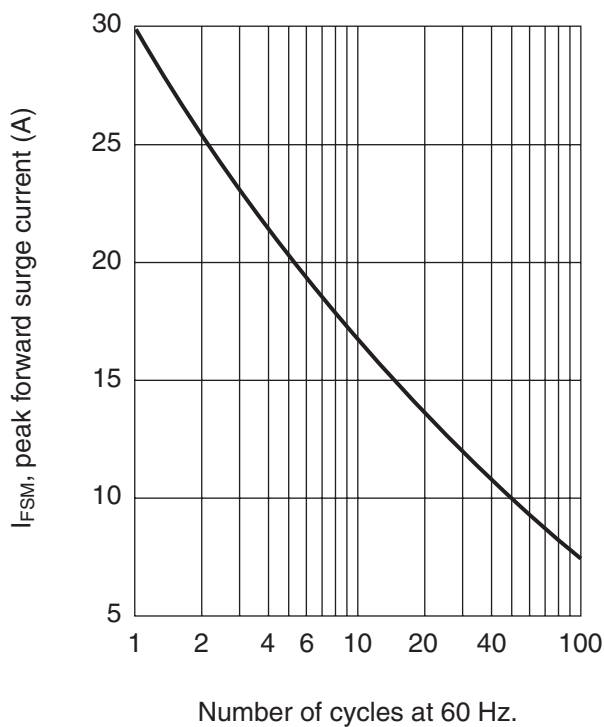
TYPICAL FORWARD VOLTAGE vs.
FORWARD CURRENT



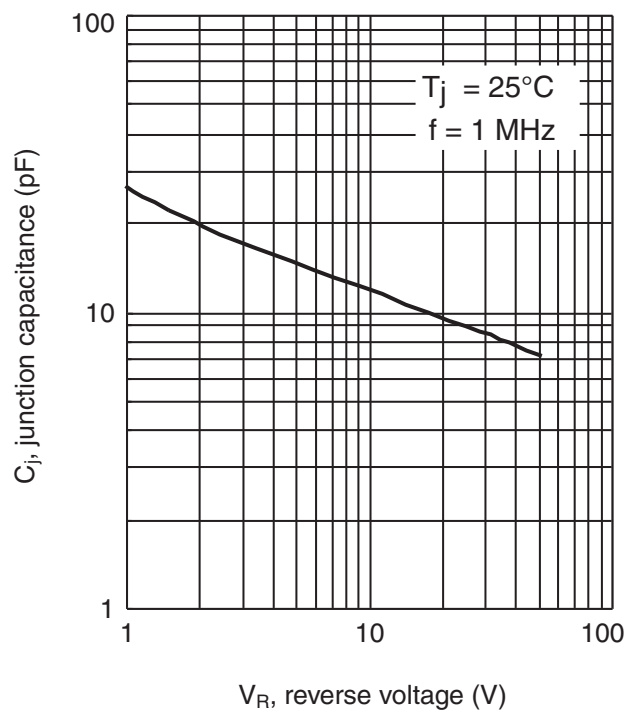
FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT



TYPICAL DIODE CAPACITANCE vs.
REVERSE VOLTAGE



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