




1.0 Amp. Glass Passivated Junction Avalanche Rectifier

<p>DO-204AL (DO-41)</p> 	<p>Voltage 200V to 1000 V</p> <p>Current 1.0 A at 55° C</p> <p>HYPERECTIFIER®</p>
	<p>FEATURES</p> <ul style="list-style-type: none"> • 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 <p>  RoHS COMPLIANT</p>
	<p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • 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.
	<p>TYPICAL APPLICATIONS</p> <p>Used in general purpose rectification of power supplies, inverters, converters and freewheeling diodes application</p>

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 $T_{amb} = 25^\circ C$

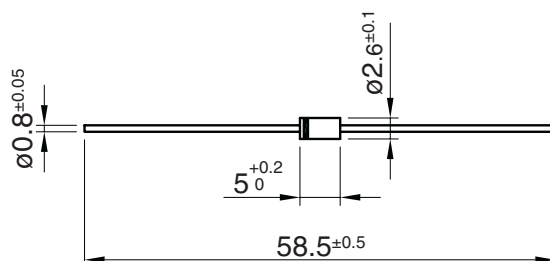
			GP10DE	GP10GE	GP10JE	GP10ME
V_{BR}	Breakdown Voltage at $I_R = 100 \mu A$	Min.	225 V	450 V	650 V	1050 V
		Max.	1400 V			
V_F	Maximum Forward Voltage Drop at $I_F = 1 A$		1.1 V			
I_R	Maximum Reverse Current at V_{RRM} at 25 °C at 125 °C		5 μA 50 μA			

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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

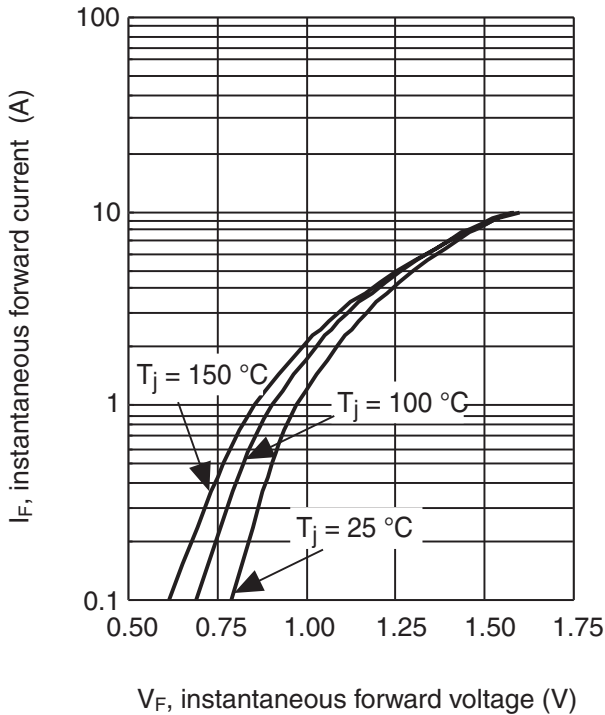
Package Outline Dimensions: (mm) DO-204AL (DO-41)



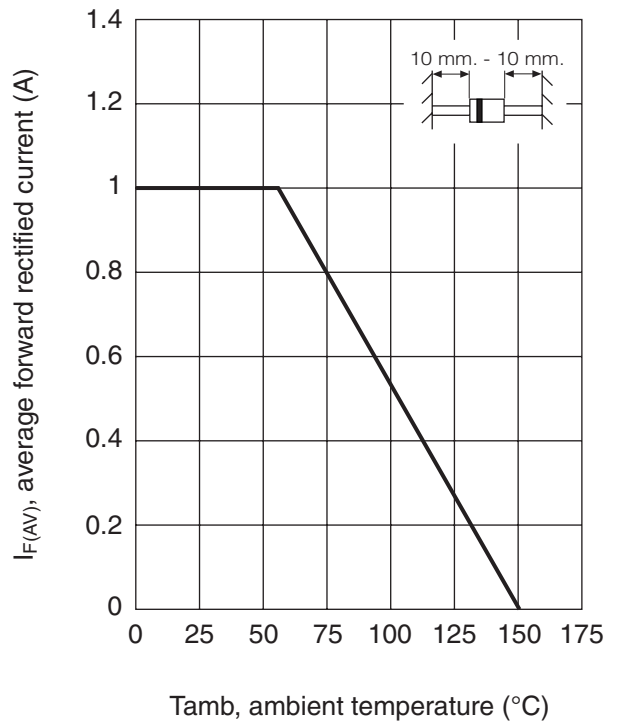
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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

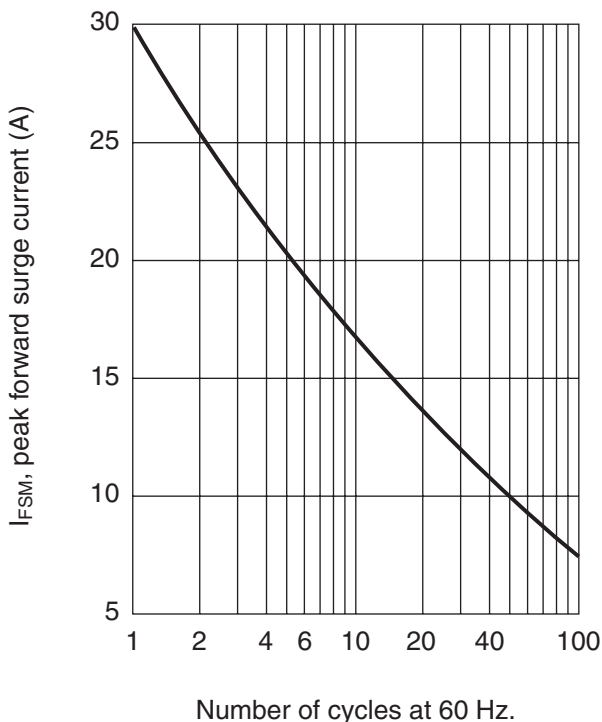
TYPICAL FORWARD VOLTAGE vs.
FORWARD CURRENT



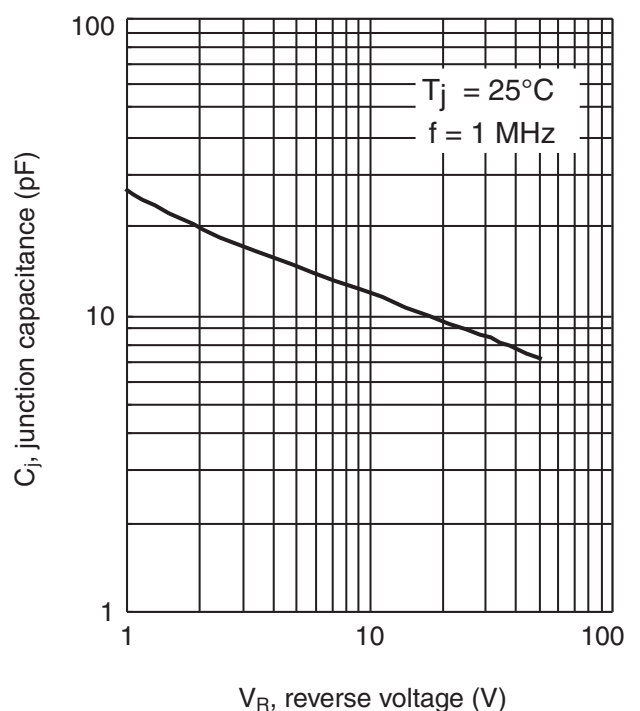
FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT



TYPICAL DIODE CAPACITANCE vs.
REVERSE VOLTAGE



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