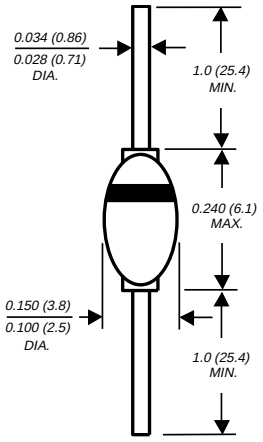
1N5059 THRU 1N5062

GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - *200 to 800 Volts* ***Forward Current -*** *1. 0 Ampere*

PATENTED*

DO-204AP



Dimensions in inches and (millimeters)

* *Brazed-lead assembly is covered by Patent No. 3,930,306*

FEATURES



- High temperature metallurgically bonded construction
- 1.0 Ampere operation at T_A=75°C with no thermal runaway
- Typical I_R less than 0.1µA
- Hermetically sealed package
- Glass passivated cavity-free junction
- Capable of meeting environmental standards of MIL-S-19500
- High temperature soldering guaranteed: 350°C/10 seconds 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case:JEDEC DO-204AP solid glass body
Terminals: Solder plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Weight: 0.02 ounce, 0.56 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	*1N5059*	*1N5060*	*1N5061*	*1N5062*	*UNITS*
* Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	Volts
Maximum RMS voltage	V_{RMS}	140	280	420	560	Volts
* Maximum DC blocking voltage	V_{DC}	200	400	600	800	Volts
* Maximum average forward rectified current 0.375" (9.5mm) lead length at T_A=75°C	$I_{(AV)}$	1.0				Amp
* Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0				Amps
* Maximum instantaneous forward voltage at 1.0A	V_F	1.2				Volts
* Maximum full Load reverse current, full cycle average 0.375" (9.5mm) lead length at T_A=25°C	$I_{R(AV)}$	5.0				µA
T_A=75°C		150		100		
* Maximum DC reverse current at rated DC blocking voltage T_A=25°C	I_R	5.0				µA
T_A=175°C		300		200		
Typical reverse recovery time (NOTE 1)	trr	1.5				µs
Typical junction capacitance (NOTE 2)	C_J	15.0				pF
Typical thermal resistance (NOTE 3)	$R_{\Theta JA}$	55.0				°C/W
* Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175				°C

NOTES:
(1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, Irr=0.25A
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
(3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length P.C.B. mounted
*JEDEC registered values

GENERAL SEMICONDUCTOR®

RATINGS AND CHARACTERISTIC CURVES 1N5059 THRU 1N5062

FIG. 1 - FORWARD CURRENT DERATING CURVE

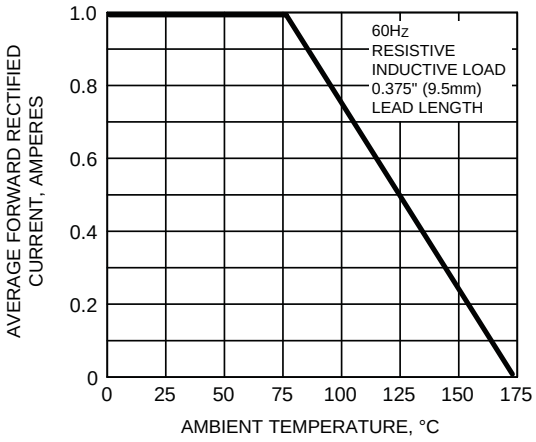


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

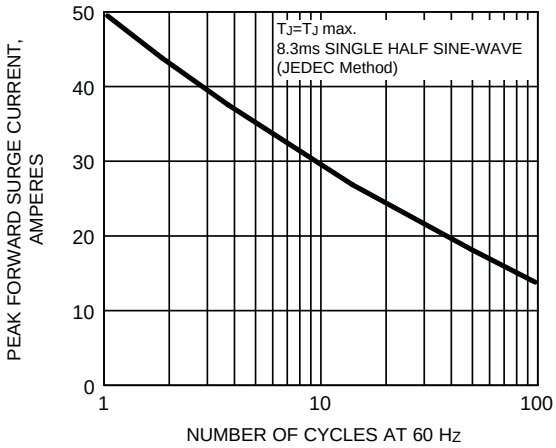


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

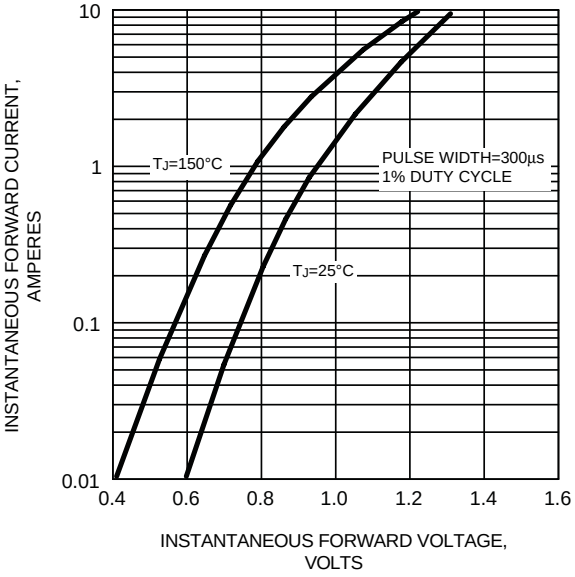


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

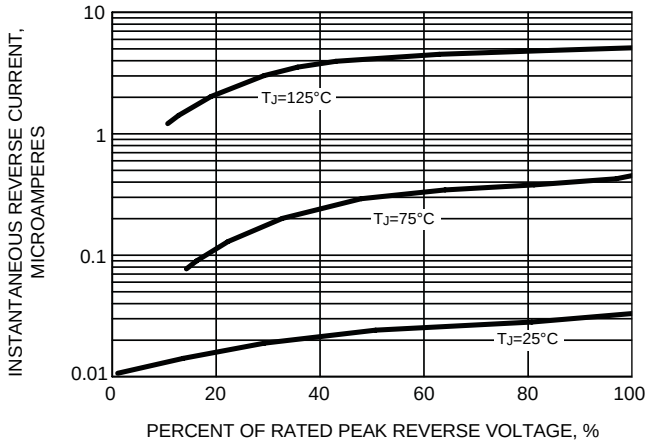


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

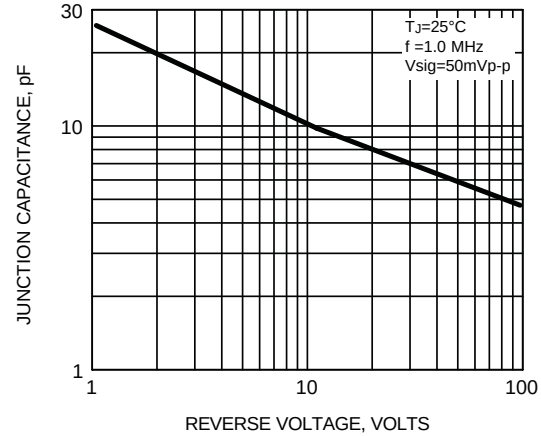
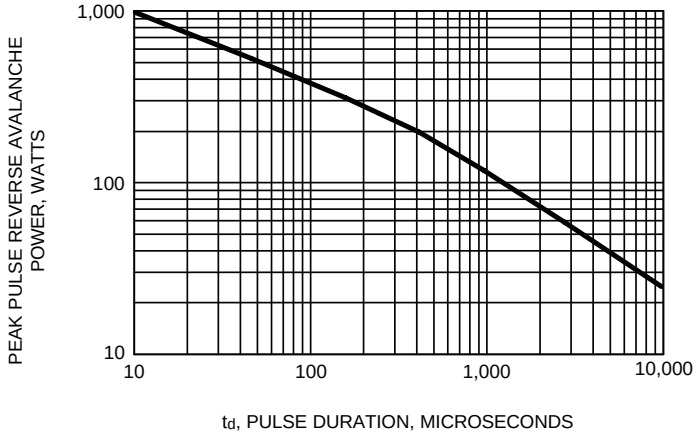


FIG. 6 - MAXIMUM NON-REPETITIVE PEAK PULSE REVERSE AVALANCHE POWER DISSIPATION



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