Glass Passivated Junction Rectifiers
Reverse Voltage 50V to 1000V Forward Current 3.0 Amperes

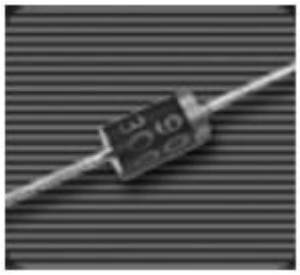
1N5401G thru 1N5408G

Features

- Low forward voltage drop.
- High current capability
- High reliability
- High surge current capability

Outline

DO-201AD



Mechanical Data

- Case : Molded plastic DO-201AD
- Epoxy : UL94V-0 rate flame retardant
- Terminals: Axial leads, solderable per MIL-STD-202 method 208 guaranteed
- Polarity: Color band denotes cathode end.
- High temperature soldering guaranteed : 250°/10seconds, .375”(9.5mm) lead length at 5 lbs.(2.3kg) tension
- Weight: 0.042 ounce, 1.195 gram

Maximum Ratings and Electrical Characteristics

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

Parameter		Symbol	Type							Units
			1N 5400G	1N 5401G	1N 5402G	1N 5404G	1N 5406G	1N 5407G	1N 5408G	
Repetitive peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage		V_R	50	100	200	400	600	800	1000	V
Maximum instantaneous forward voltage, I_F=3A		V_F	1.1							V
Maximum average forward rectified current @ T_A=75℃		$I_{F(AV)}$	3							A
Peak forward surge current @8.3ms single half sine wave superimposed on rated load (JEDEC method)		I_{FSM}	125							A
Maximum DC reverse current, at rated DC blocking voltage	T_A=25°C	I_R	5							μA
	T_A=125°C		100							
Typical junction capacitance (Note 1)		C_J	30							pF
Storage temperature		Tstg	-55 ~ +150							℃
Operating junction temperature range		T_J	-55 ~ +150							℃

Note : 1.Measured at 1MHz and applied reverse voltage of 4 V_{DC}

Characteristic Curves

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

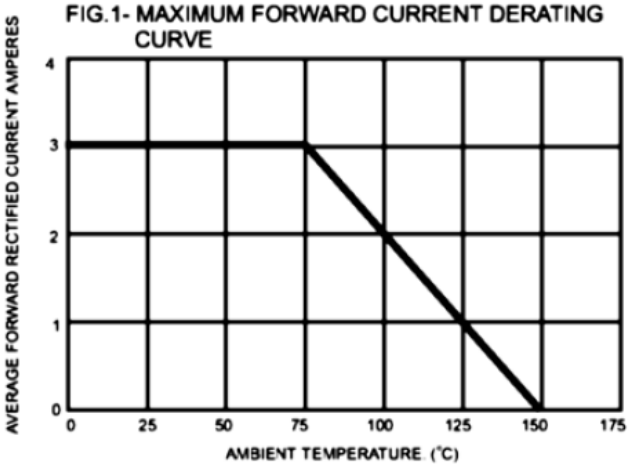


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

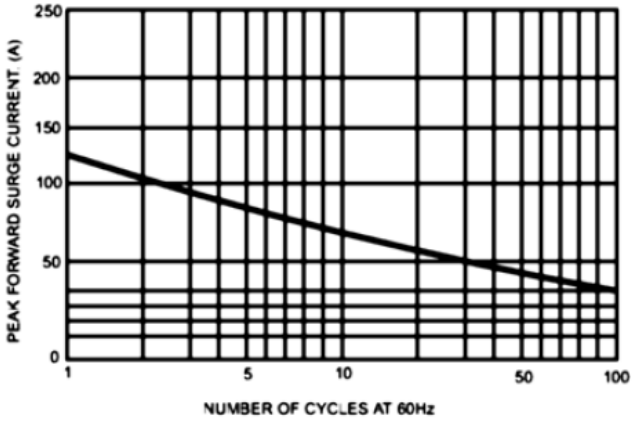


FIG.3- TYPICAL FORWARD VOLTAGE

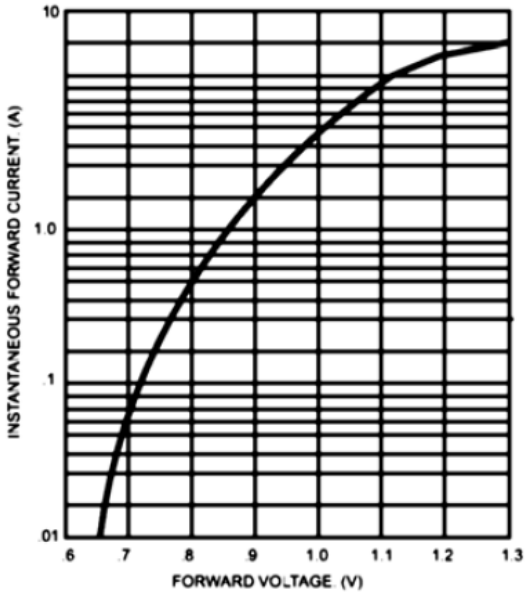
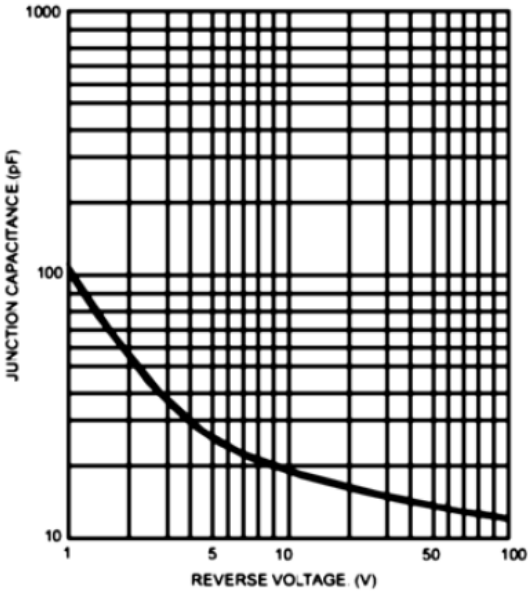
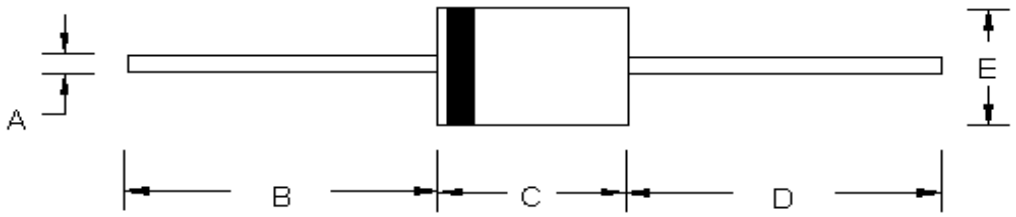


FIG.4- TYPICAL JUNCTION CAPACITANCE



DO-201AD Dimension



DO-201AD Molded Plastic Package
CYStek Package Code: LD

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	φ0.048	φ0.052	φ1.20	φ1.30	D	1.000	-	25.40	-
B	1.000	-	25.40	-	E	φ0.190	φ0.220	φ4.80	φ5.60
C	0.285	0.375	7.20	9.50					

Notes : 1.Controlling dimension : millimeters.
2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material :

- Lead : Axial leads, solderable per MIL-STD-750, Method 2026 guaranteed.
- Mold Compound : Epoxy resin family, flammability solid burning class: UL94V-0