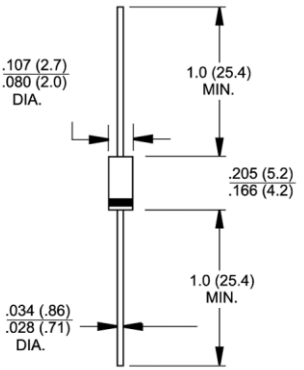
1N5391L thru 1N5399L

1.5 Amps. General Purpose Plastic Rectifiers
Voltage Range 50 to 1000 Volts Forward Current 1.5 Amperes

Features

- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL recognition 94V-0

DO-204AL (DO-41)



Dimensions in inches and (millimeters)

Mechanical Data

- Case : JEDEC DO-204AL (DO-41) molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounce, 0.34 gram
- Mounting position: Any

Maximum Ratings and Electrical Characteristics

Ratings 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	Symbols	1N 5391L	1N 5392L	1N 5393L	1N 5394L	1N 5395L	1N 5396L	1N 5397L	1N 5398L	1N 5399L	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum average forward rectified current .375" (9.5mm) lead lengths @T_L=70°C	$I_{(AV)}$	1.5									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0									Amps
Maximum forward voltage at 1.5A DC	V_F	1.4									Volts
Maximum DC reverse current @T_J=25°C at rated DC blocking voltage @T_J=100°C	I_R	5.0 50									uA
Typical junction capacitance (Note 1)	C_J	20.0									pF
Typical thermal resistance (Note 2)	$R_{\theta JL}$	26.0									°C/W
Operating temperature range	T_J	-55 to +125									°C
Storage temperature range	T_{STG}	-55 to +150									°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

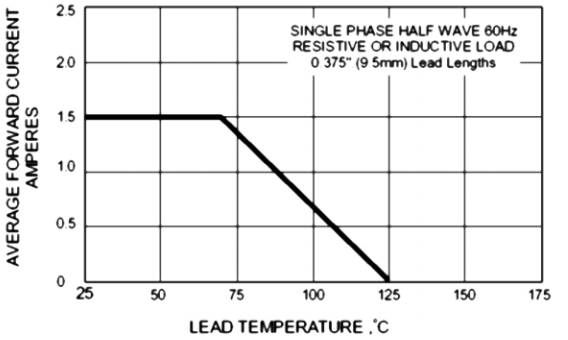


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

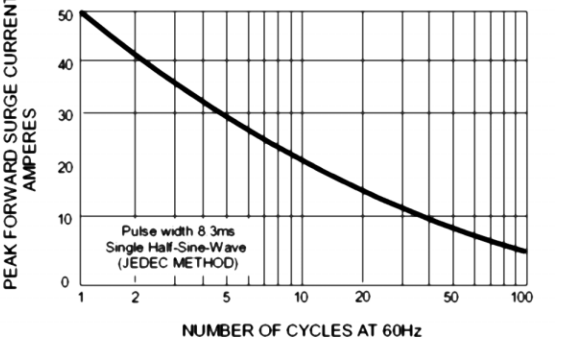


FIG.3 - TYPICAL JUNCTION CAPACITANCE

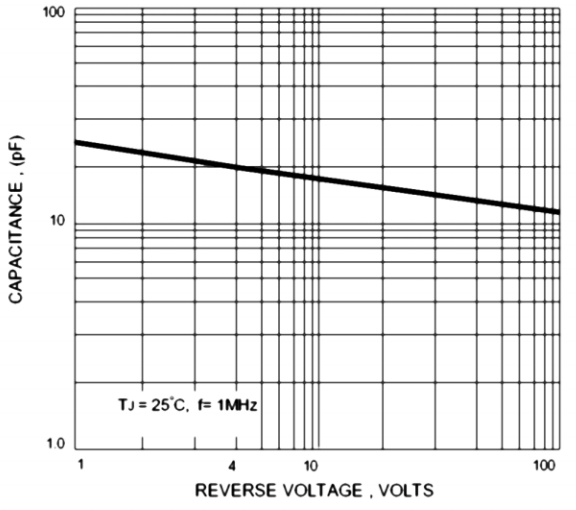


FIG.4 - TYPICAL FORWARD CHARACTERISTICS