3.0Amp Silicon Rectifiers

1N540XLA Series

Features

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

Mechanical Data

- Case : Molded plastic DO-201AD
- Epoxy : UL94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-202 method 208 guaranteed
- Polarity: Color band denotes cathode end.
- Mounting Position : Any.
- Weight: 1.1 gram

Maximum Ratings and Electrical Characteristics

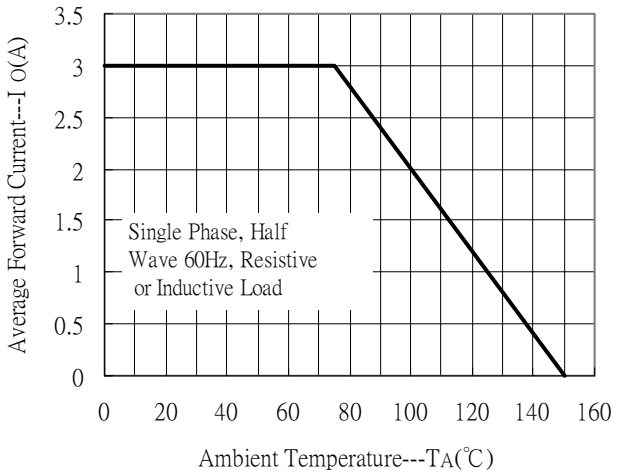
(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

Parameter	Symbol	Type							Units
		1N 5400	1N 5401	1N 5402	1N 5404	1N 5406	1N 5407	1N 5408	
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	0.95							V
Maximum average forward rectified current, 0.375"(9.5mm) lead length at 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}	200							A
Maximum DC reverse current, at rated DC blocking voltage T_J=25℃ T_J=100℃	I_R	 5 50							 μA μA
Typical thermal resistance(Note 1)	$R_{th, JA}$	30							℃/W
Typical junction capacitance (Note 2)	C_J	40							pF
Storage temperature	Tstg	-65 ~ +175							℃
Operating temperature	T_J	-65 ~ +175							℃

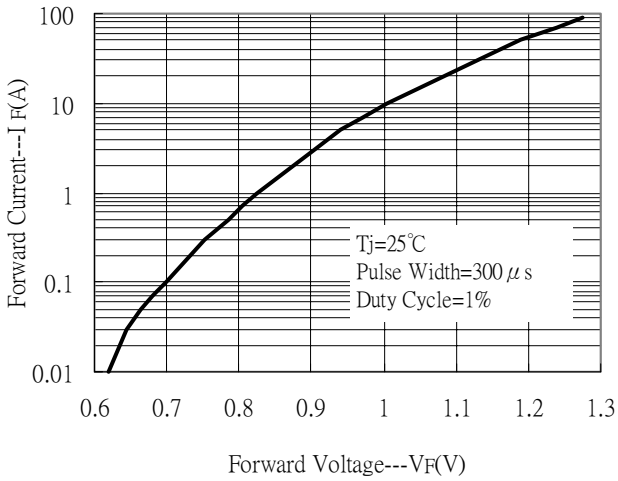
Note : 1.Thermal resistance from junction to ambient, 0.375"(9.5mm) lead length.
2. Measured at 1MHz and applied reverse voltage of 4V_{DC}.

Characteristic Curves

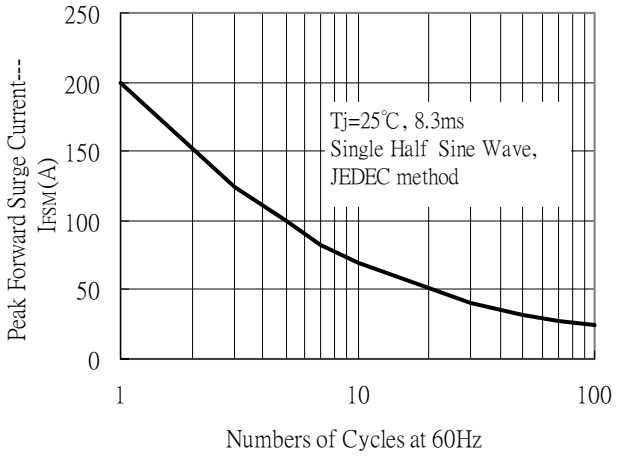
Forward Current Derating Curve



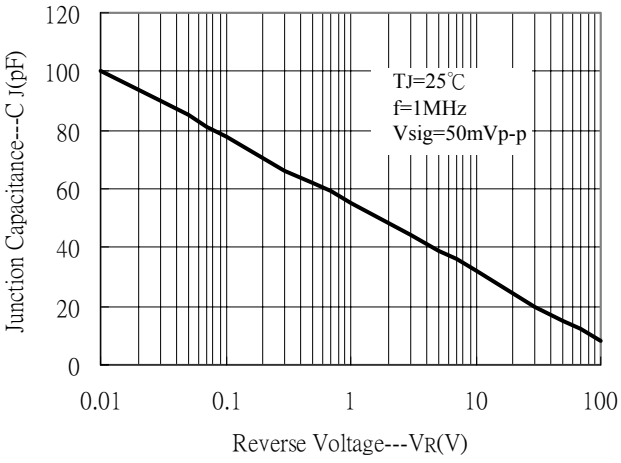
Forward Current vs Forward Voltage



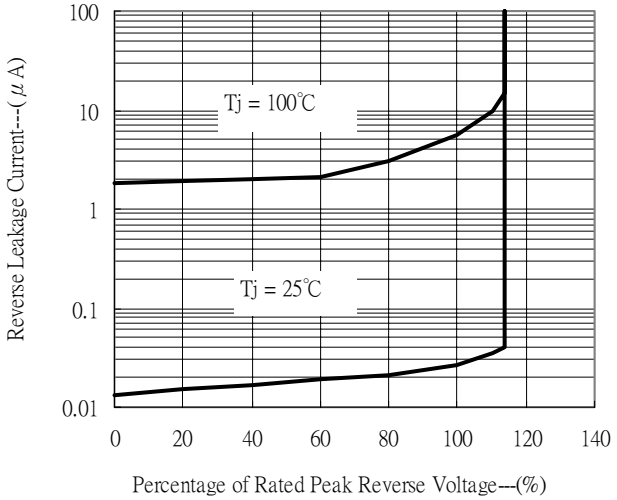
Maximum Non-Repetitive Forward Surge Current



Junction Capacitance vs Reverse Voltage

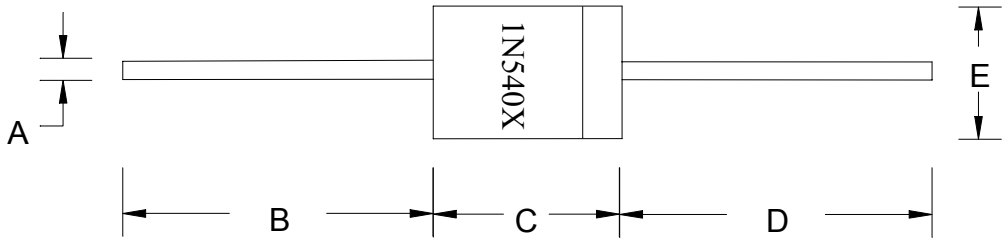


Reverse Leakage Current vs Reverse Voltage



DO-201 Dimension

Marking : On the cylindrical surface



DO-201 Molded Plastic Package
CYStek Package Code: LA

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0472	0.0520	1.20	1.30	D	1.0000	-	25.40	-
B	1.0000	-	25.40	-	E	0.1890	0.2200	4.80	5.60
C	0.2835	0.3750	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-202, Method 208 guaranteed.
- Mold Compound : Epoxy resin family, flammability solid burning class: UL94V-0