DO-15(DO-204AC)

Features

- ROHS compliant
- Glass passivated chip
- High forward surge capability
- Meet MSL level 1, per J-STD-020 LF maximum peak of 250 °C
- Solder dip 260 °C / 40S
- Component in accordance to ROHS 2002/95/EC and WEEE 2002/96/WC
- UL recognition, file number E342874

Primary characteristics

$I_{F(AV)}$	1.5A
V_{RRM}	50V to 1000V
I_{FSM}	50A
I_{RM}	5uA
V_{FM} at I_F=1.5A	1.4V
T_J max.	150 °C

Applications

Ideal for ac-to-dc bridge full wave rectification suck as SMPS, home applianes, office equipment, indusrial automation applicatios

Mechanical data

- Case:DO-15(DO-204AC)
- Epoxy meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads.
- Polarity: As marked.
- Mounting Torque:10cm-kg(8.8 inches-lbs)max.
- Recommended Torque:5.7 cm-kg(5 inches-lbs)

Maximum rating (Ta=25°C unless otherwise noted)

Parameter		Sym	DO-15(DO-204AC)									Unit
			1N 5391 G	1N 5392 G	1N 5393 G	1N 5394 G	1N 5395 G	1N 5396 G	1N 5397 G	1N 5398 G	1N 5399 G	
Max. repetitive peak reverse voltage		V_{RRM}	50	100	200	300	400	500	600	800	1000	V
Max. RMS reverse voltage		V_{RMS}	35	70	140	210	280	350	420	560	700	V
Max. DC blocking voltage		V_{DC}	50	100	200	300	400	500	600	800	1000	V
Max. average forward current		$I_{F(AV)}$	1.5									A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave		I_{FSM}	50									A
Max. instantaneous forward voltage drop per diode		V_{FM}	1.4(1.5A)									V
Max. instantaneous reverse current at rated DC blocking voltage	Ta=25°C	I_{RM}	5									μA
	Ta=125°C		300									μA
Operating junction temperature		T_J	-55 ~ +150									°C
Storage temperature		T_{STG}	-55 ~ +150									°C
Typical thermal resistance (Note 1)		$R_{\Theta J-A}$	45									°C/W
Typical junction capacitance (Note 2)		C_J	15									pF
Typical reverse recovery time (Note 3)		t_{rr}	1									us

Notes: 1.Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C

3. Reverse recovery test conditions: IF=0.5A, IR=1.0A, Irr=0.25A

Ordering information (Example)				
PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
1N5399G				

Typical characteristics

FIG. 1 - FORWARD CURRENT DERATING CURVE

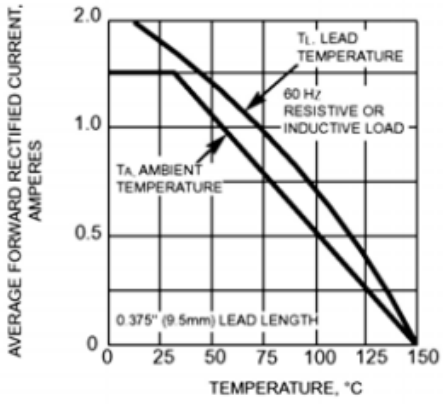


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

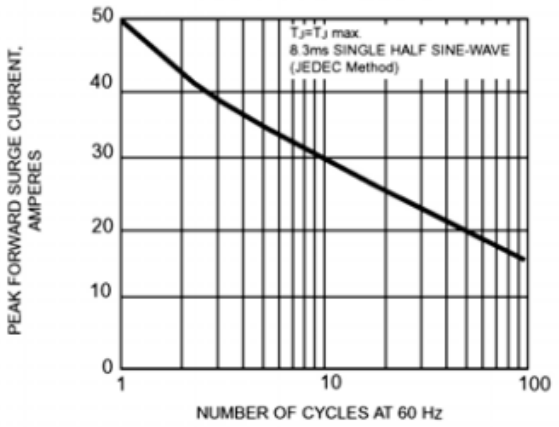


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

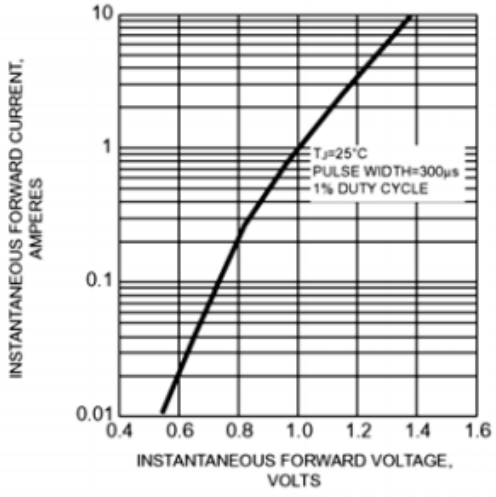
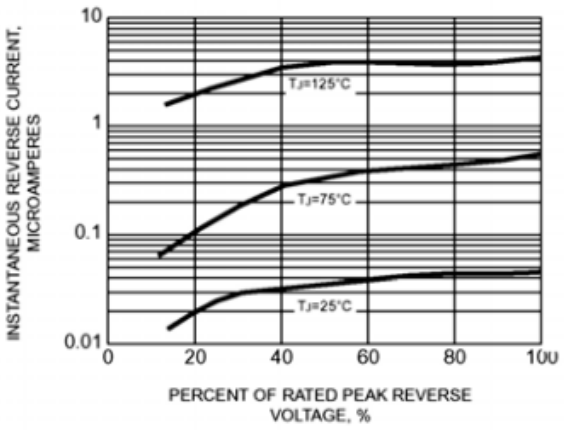
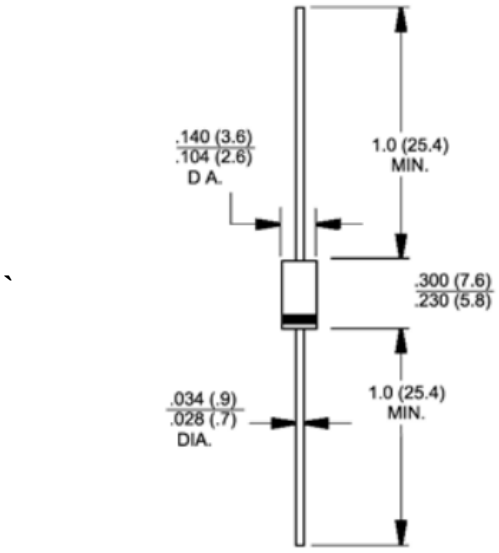


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



Package outline dimensions



Dimensions in inches and (millimeters)

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