

General Purpose Rectifier

Features

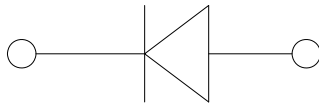
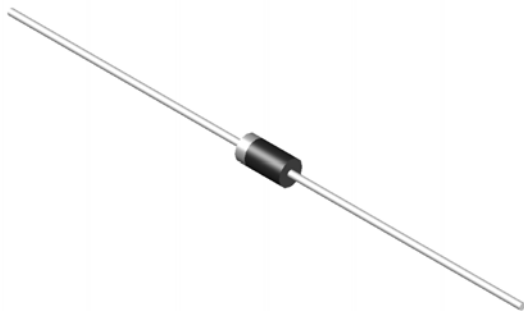
- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

Mechanical Data

- **Package:** DO-204AL(DO-41)
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:**Color band denotes cathode end



■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1N5391GS	1N5392GS	1N5393GS	1N5395GS	1N5397GS	1N5398GS	1N5399GS
Device marking code			1N5391GS	1N5392GS	1N5393GS	1N5395GS	1N5397GS	1N5398GS	1N5399GS
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta=75°C	IF(AV)	A	1.5						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Tj=25°C	IFSM	A	50						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			100						
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I²t	A²s	10.375						
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	Cj	pF	13						
Storage Temperature	Tstg	°C	-55 ~ +150						
Junction Temperature	Tj	°C	-55 ~ +150						

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	1N5391GS	1N5392GS	1N5393GS	1N5395GS	1N5397GS	1N5398GS	1N5399GS
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=1.5A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	IR	µA	Tj=25°C	2.5						
			Tj=125°C	50						



1N5391GS THRU 1N5399GS

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1N5391GS	1N5392GS	1N5393GS	1N5395GS	1N5397GS	1N5398GS	1N5399GS
Typical Thermal Resistance	R _{θJ-A}	°C/W	55						

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N5391GS~1N5399GS	D1	Approximate 0.30	Approximate 5000	5000	50000	Tape
1N5391GS~1N5399GS	C1	Approximate 0.30	Approximate 1000	1000	50000	Bulk

■ Characteristics (Typical)

FIG.1: I_o-T_a Curve

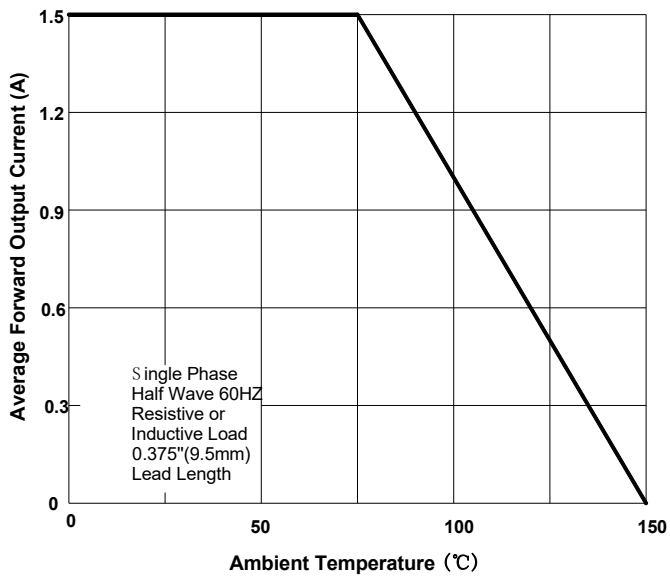


FIG.2: Forward Surge Current Capability

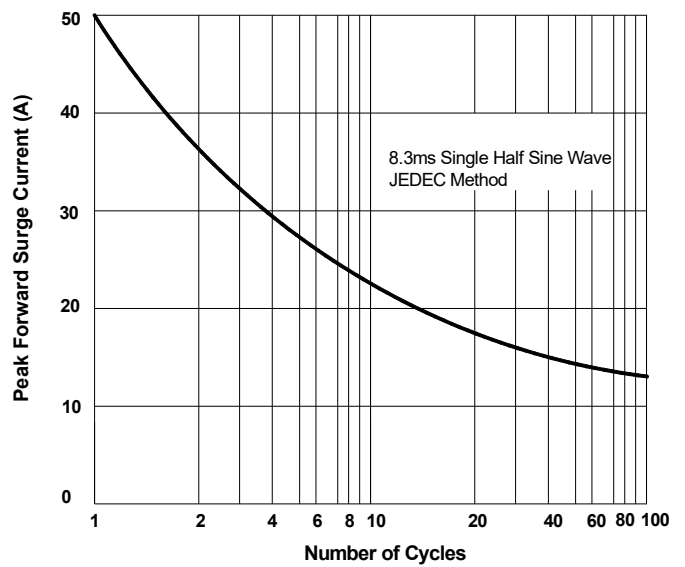


FIG.3: Forward Voltage

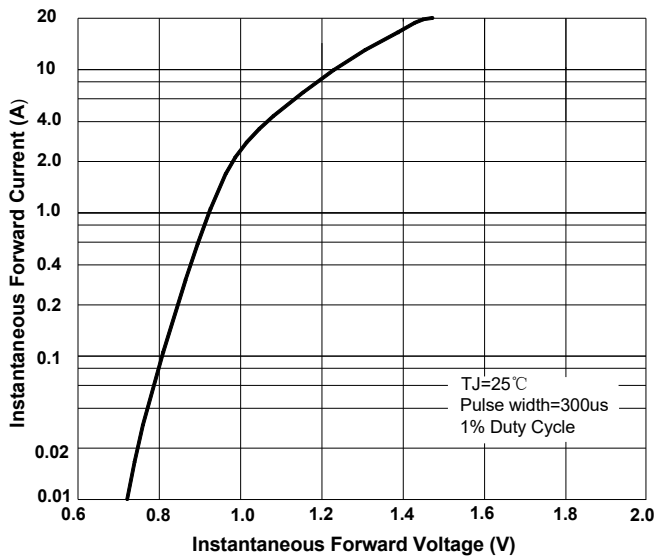
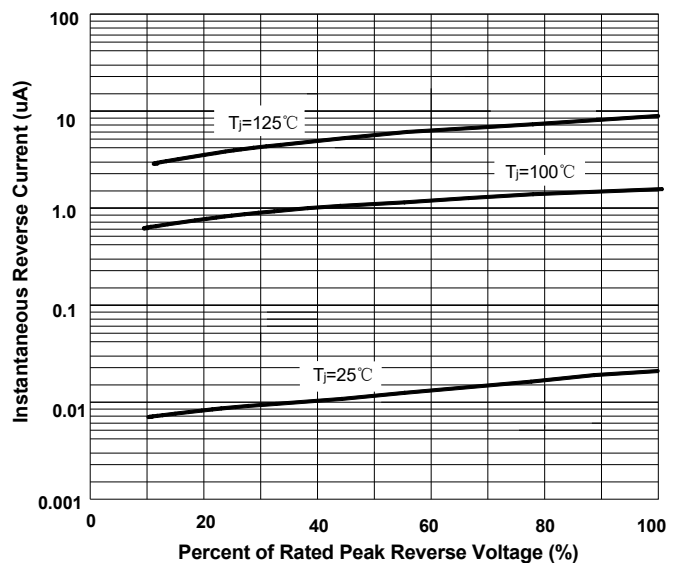


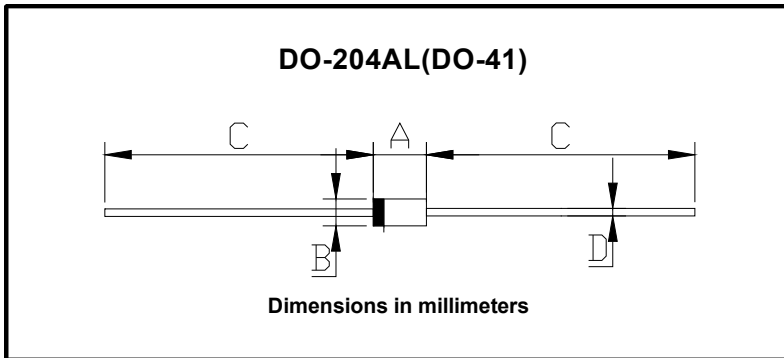
FIG.4: Typical Reverse Characteristics





1N5391GS THRU 1N5399GS

■ Outline Dimensions



DO-204AL(DO-41)		
Dim	Min	Max
A	4.22	5.21
B	2.03	2.72
C	25.4	/
D	0.69	0.86



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