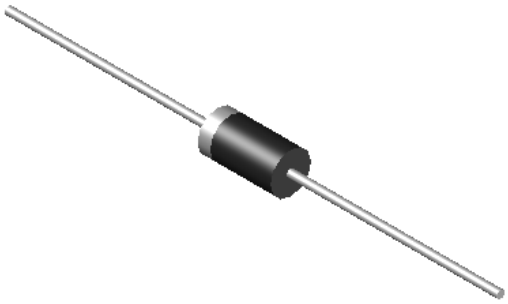
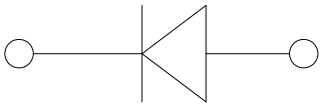
General Purpose Rectifier





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-201AD(DO-27)

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℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1N5416G
Device marking code			1N5416G
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	1600
Maximum RMS Voltage	V_{RMS}	V	1120
Maximum DC blocking Voltage	V_{DC}	V	1600
Average Forward Current @60Hz sine wave, Resistance load, Ta =55℃	$I_{F(AV)}$	A	3.0
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25℃	I_{FSM}	A	120
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃			240
Current squared time @1ms≤t8.3≤ms Tj=25℃， Rating of per diode	I^2t	A^2s	60
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	Cj	pF	27
Storage Temperature	Tstg	℃	-55 ~ +150
Junction Temperature	Tj	℃	-55 ~ +150

■Electrical Characteristics（Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	1N5416G
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=3.0A	1.2
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	Tj =25℃	5
			Tj =125℃	150

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	1N5416G
Typical Thermal Resistance	$R_{\theta J-A}$	℃/W	30

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N5416G	D1	Approximate 1.05	1250	1250	12500	Tape
1N5416G	C1	Approximate 1.05	250	250	12500	Bulk

■ Characteristics (Typical)

FIG.1: Io-Ta Curve

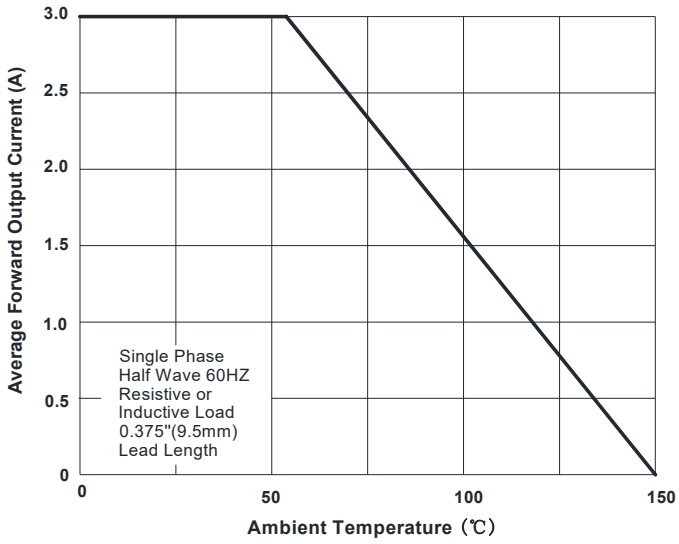


FIG.2: Forward Surge Current Capability

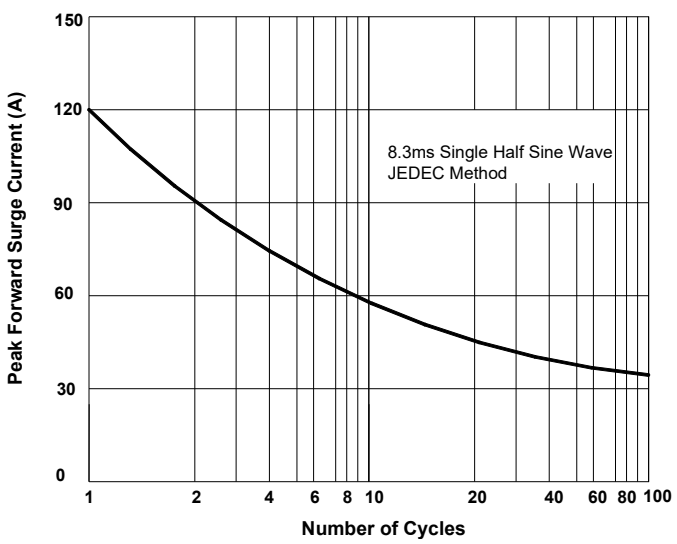


FIG.3: Typical Forward Voltage

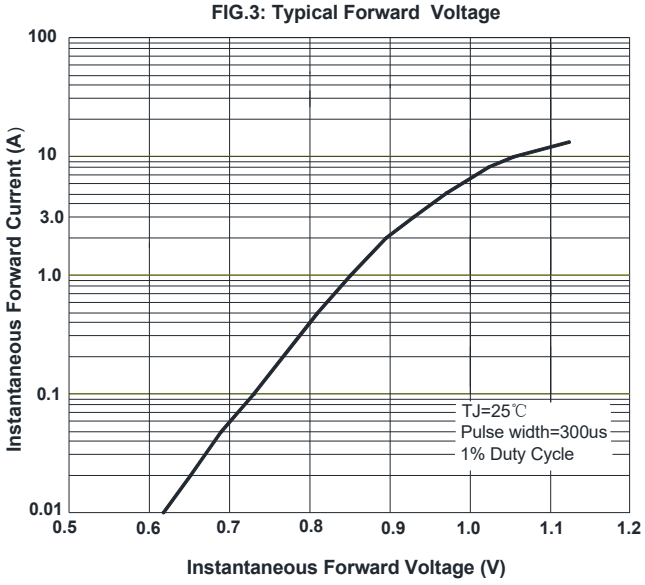
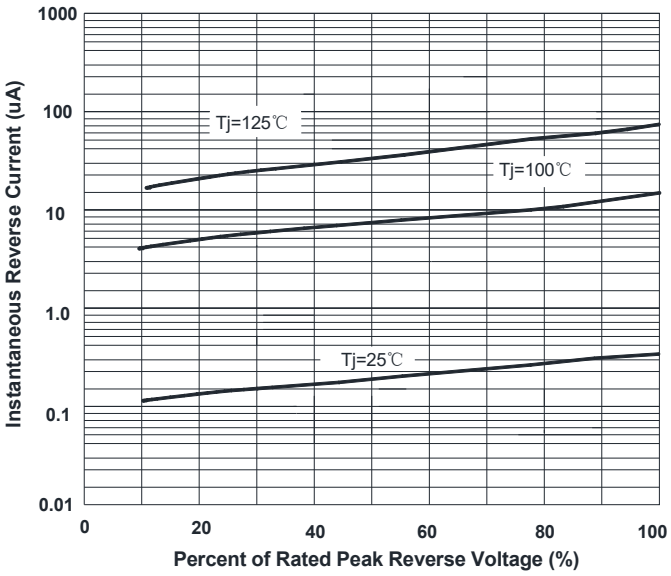
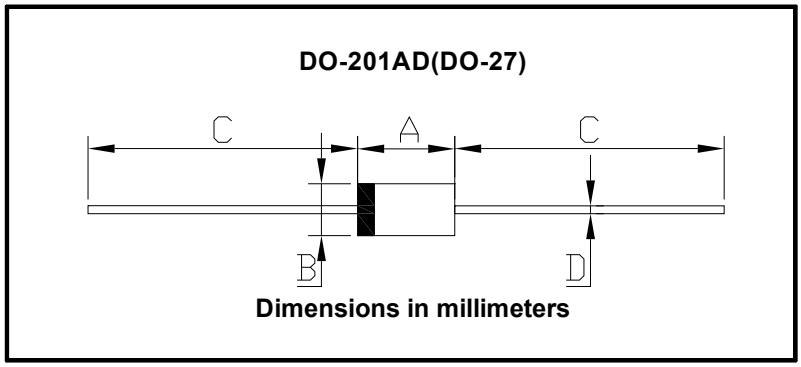


FIG.4: Typical Reverse Characteristics



■ Outline Dimensions



DO-201AD(DO-27)		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.20	1.30

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