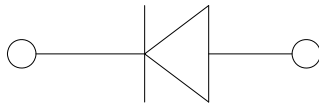
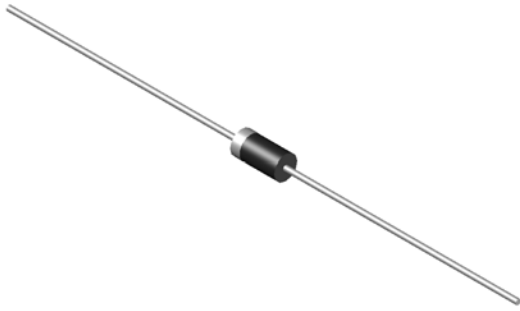


## Axial Lead General Purpose High Voltage Diode



### 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

### Mechanical Data

- **Package:** A-405  
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 (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	G1A5KS
Device marking code			G1A5KS
Maximum Repetitive Peak Reverse Voltage	VRRM	V	5000
Maximum RMS Voltage	VRMS	V	3500
Maximum DC blocking Voltage	VDC	V	5000
Average Forward Current @60Hz sine wave, Resistance load, T <sub>c</sub> =50°C	I <sub>F(AV)</sub>	mA	30
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T <sub>j</sub> =25°C	I <sub>FSM</sub>	A	30
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T <sub>j</sub> =25°C			60
Current squared time @1ms≤t≤8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	3.735
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C <sub>j</sub>	pF	2.3
Storage Temperature	T <sub>stg</sub>	°C	-55 ~ +150
Junction Temperature	T <sub>j</sub>	°C	-55 ~ +150

### ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	G1A5KS
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	IFM=1.0A	6
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>j</sub> =25°C	5
			T <sub>j</sub> =125°C	100



# G1A5KS

## ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	G1A5KS
Typical Thermal Resistance	R <sub>θJ-C</sub>	°C/W	18

## ■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
G1A5KS	D1	Approximate 0.22	Approximate 5000	5000	50000	Tape
G1A5KS	C1	Approximate 0.22	Approximate 1000	1000	50000	Bulk

## ■ Characteristics (Typical)

FIG.1: I<sub>o</sub>-T<sub>c</sub> Curve

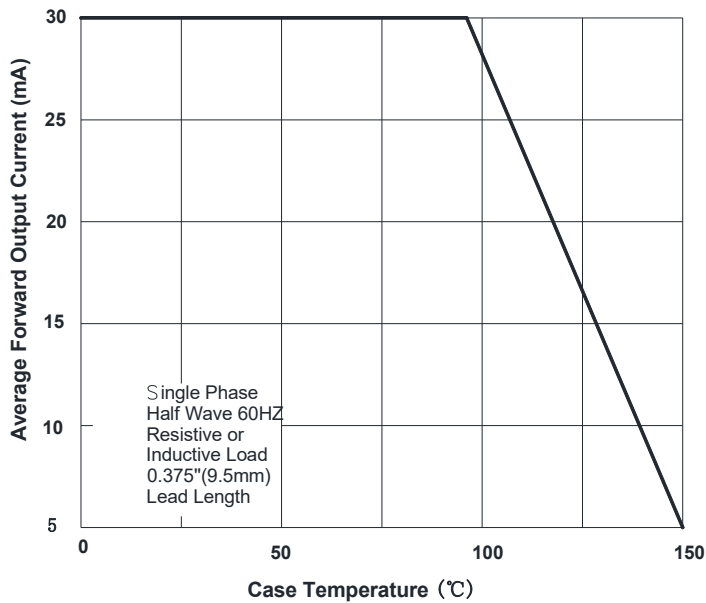


FIG.2: Surge Forward Current Capability

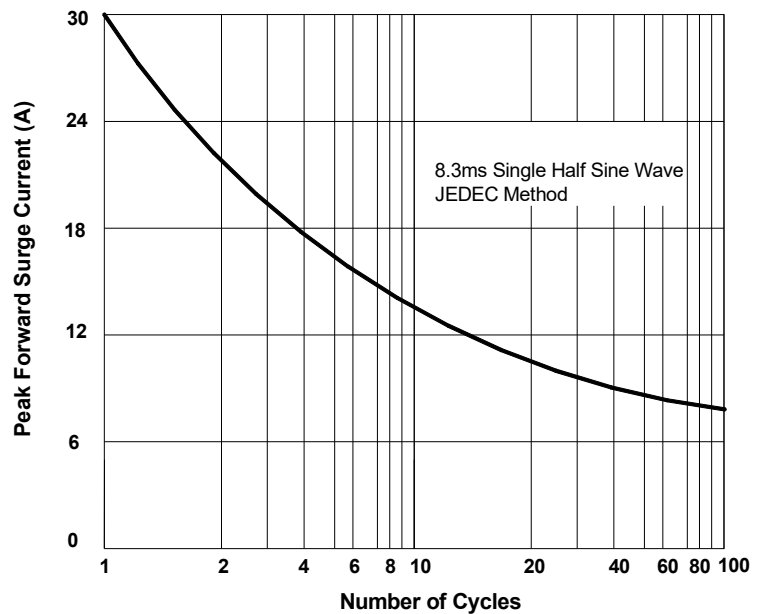


FIG.3: Typical Forward Voltage

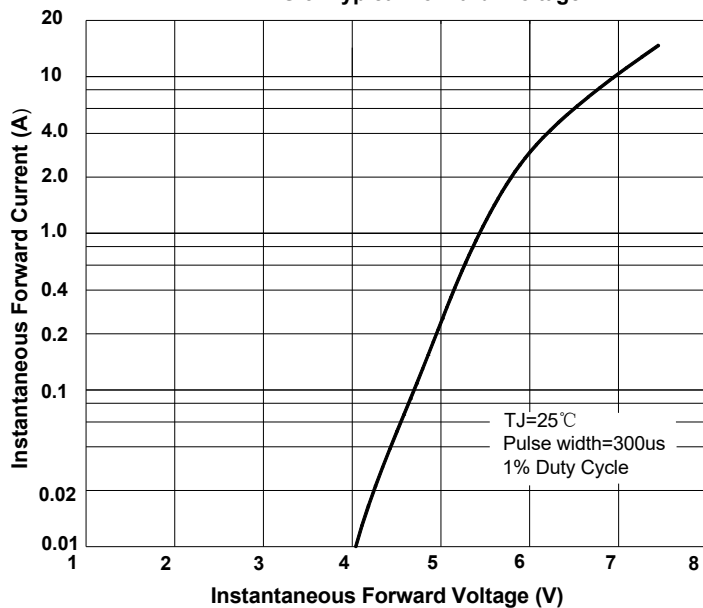
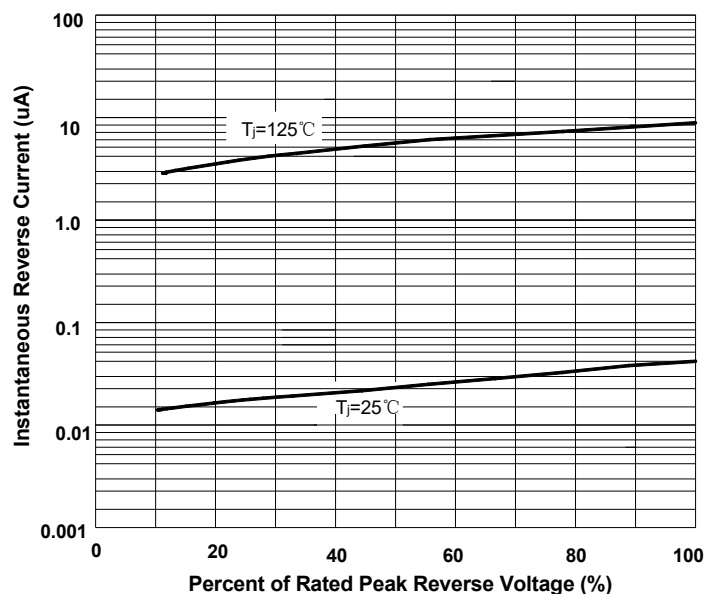
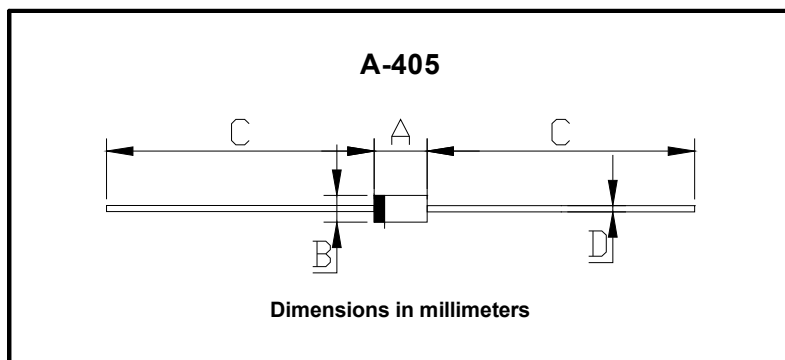


FIG.4: Typical Reverse Characteristics





## ■ Outline Dimensions



A-405		
Dim	Min	Max
A	4.22	5.21
B	2.03	2.72
C	25.4	/
D	0.53	0.64



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