

SMALL SIGNAL/COMPUTER DIODE CHIP

TECHNICAL DATA DATA SHEET 6119, REV -

# SMALL SIGNAL / COMPUTER DIODE CHIP

### **FEATURES / BENEFITS:**

- ✓ Die fabricated on a MIL-PRF-19500 JANKCD/JANHCD qualified manufacturing line
- ✓ Class H and class K element evaluation per MIL-PRF-19500/169
- ✓ All ratings are @  $T_A = 25$  °C unless otherwise specified

#### **ELECTRICAL CHARACTERISTICS:**

#### **MAXIMUM RATINGS**

ALL RATINGS ARE AT TA = 25 °C UNLESS OTHERWISE SPECIFIED

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RATING		SYMBOL	MAX.	UNITS
BREAKDOWN VOLTAGE	$(I_R = 100 \mu A)$	$V_{BR}$	200	Volts
WORKING PEAK REVERSE VOLTAGE		$V_{RWM}$	175	Volts
AVERAGE RECTIFIED FORWARD CURRENT	(T <sub>A</sub> =75°C)	Io	100	mA
PEAK SINGLE CYCLE SURGE CURRENT (PEA	$(t_p = 1.0s)$ $(t_p = 1.0\mu s)$	IFSM	500 2.0	mA A
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE		T <sub>op, stg</sub>	-65 to +175	°C

### **ELECTRICAL CHARACTERISTICS**

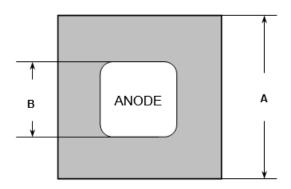
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP (I <sub>F</sub> = 100 mA dc)	V <sub>F1</sub>	1.0	Volt
(T <sub>A</sub> =-55°C, I <sub>F</sub> = 100 mA dc)	V <sub>F2</sub>	1.2	Volt
REVERSE CURRENT (VR = VRWM)	I <sub>R1</sub>	0.1	μA dc
$(T_A=+150^{\circ}C, V_R=V_{RWM})$	I <sub>R2</sub>	100	μA dc
CAPACITANCE $(V_R = 0 \text{ Vdc}; V_{sig}=50 \text{ mV}_{(p-p)} \text{ max}, f = 1 \text{ MHz})$	Ст1	5.0	pF
MAXIMUM REVERSE RECOVERY TIME (I <sub>F</sub> = I <sub>R</sub> = 30 mA, I <sub>RR</sub> = 3mA)	t <sub>rr</sub>	50	ns

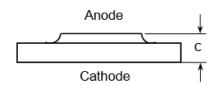


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## PACKAGE DIMENSIONS (inches/mm):





	Dimensions				
Ltr	Inches		Millimeters		
	Min	Max	Min	Max	
Α	.016	.020	0.406	0.508	
В	.008	.010	0.203	0.254	
С	.008	.012	0.203	0.305	

NOTES: 1. Dimensions are in inches.

2. Millimeter equivalents are given for general information only.

3. The die thickness is .010 (0.25 mm) ±.002 inches (±0.05 mm). Anode metallization: Al, thickness = 45,000 Å nominal; Cathode metallization: Ti/Ni/Au (1,200 Å / 1,800 Å / 4,000 Å) nominal.





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#### PART ORDERING INFORMATION:



#### Quality Level:

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Suffix	Part Number	Description	
Н	JANHCD1N3070	Class H level	
K	JANKCD1N3070	Class K level	

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