

## ZENER 0.5W VOLTAGE REGULATOR CHIP/DIE

### CONFIGURATION: Zener 500mW Voltage Regulator

- Die fabricated on a MIL-PRF-19500 JANKC qualified manufacturing line
- Class H and class K element evaluation per MIL-PRF-19500/127
- All ratings are @  $T_c = 25^\circ\text{C}$  unless otherwise specified.
- Operating and storage temperature:  $-65^\circ\text{C}$  to  $+175^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS

PART NUMBER	NOMINAL ZENER VOLTAGE	ZENER TEST CURRENT	MIN ZENER VOLTAGE	MAX ZENER IMPEDANCE	FORWARD VOLTAGE	MAX REVERSE CURRENT			MAX ZENER CURRENT	MAX TEMP. COEFF. OF ZENER VOLTAGE
	$V_{Z2} @ I_{ZT} = 20\text{mA}$	$I_{ZT}$	$V_{Z1} @ 0.25\text{mA}$	$Z_{ZT} @ I_{ZT}$	$V_F$	$I_R @ V_R$			$I_{ZM}$	$\alpha_{VZ}$
	NOTE (1)		NOTE (2)		NOTE (3)	NOTE (4)				
	V	mA	V	$\Omega$	V	$I_{R1}$ $\mu\text{A}$	$I_{R2}$ $\mu\text{A}$	$V_R$ A	mA	%/ $^\circ\text{C}$
1N757A	9.1	20	8.4	6	1.1	1	7.0	7.0	45	+068
1N758A	10.0	20	9.1	7	1.1	1	8.0	8.0	40	+076
1N759A	12.0	20	11.0	10	1.1	1	9.0	9.0	35	+080

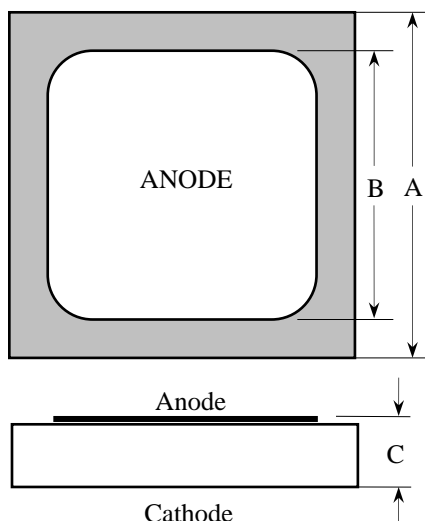
1/.  $V_{Z2}$  tolerance  $\pm 5\%$

2/.  $V_{Z1}$  maximum is the same as  $V_{Z2}$  maximum

3/.  $V_F$  maximum,  $I_F = 200\text{ mA dc}$

4/.  $I_{R2}$  maximum at  $150^\circ\text{C}$

**PACKAGE DIMENSIONS (inches/mm)**



Ltr	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	.023	.027	0.584	0.686
B	.015	.019	0.381	0.483
C	.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)  $\pm$ .002 inches ( $\pm$ 0.05 mm).  
Anode metallization: Al, thickness = 45,000 Å nominal;  
Cathode metallization: Au, thickness = Ti/Au (200Å/4,350Å) nominal

JANHCD1N757A thru JANHCD1N759A  
JANKCD1N757A thru JANKCD1N759A

ZENER 0.5W VOLTAGE REGULATOR  
CHIP/DIE

**SENSITRON**  
**SEMICONDUCTOR**

TECHNICAL DATA  
DATASHEET 6004, REV A

**PART ORDERING INFORMATION:**

**JAN<sub>x</sub>CD1NXXXXA**

↓                      ↓

**Quality Level**                      **Part Number**

Suffix	Part Number	Description
H	JANHCD1N759A	Class H Level
K	JANKCD1N759A	Class K Level

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