

## V<sub>F</sub> Controlled Diodes

*Qualified per MIL-PRF-19500/241*

### DESCRIPTION:

This voidless hermetically sealed Vf controlled diode is military qualified per MIL-PRF-19500/241 and is targeted for space, commercial and military aircraft, military vehicles, shipboard markets and all high reliability applications.

### FEATURES / BENEFITS:

- ✓ Hermetic, non-cavity glass package
- ✓ Category I Metallurgically bonded
- ✓ All devices are 100% hot solder dipped
- ✓ JAN/ JANTX/ JANTXV available per MIL-PRF-19500/241
- ✓ "JANS Plus" removes atypical/out of family V<sub>F</sub>

### MAXIMUM RATINGS:

- ✓ Operating and Storage Temperature: -65°C to +175°C
- ✓ Forward Voltage (max): 1Vdc @ 200mA, .92Vdc @ 100mA
- ✓ Reverse Leakage Current (max): 1 nAd c @ V<sub>R</sub>

### ELECTRICAL CHARACTERISTICS:

Type	V <sub>R</sub>	I <sub>o</sub>	I <sub>FSM</sub> Tp=1s	T <sub>STG</sub> , T <sub>J</sub>	R <sub>θJL</sub> L=.375	R <sub>θJEC</sub> L=0	R <sub>θJX</sub>
	V(pk)	MA	mA(pk)	°C	°C/W	°C/W	°C/W
1N3595, 1N3595US-1	125	150	500	-65 to +175	250	40	245

Maximum ratings T<sub>A</sub>=+25°C

\*Sensitron **space equivalent diodes** are manufactured and screened to MIL-PRF-19500 flow and guidelines starting from wafer fabrication through assembly and testing using our internal specification.

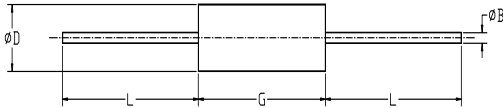
**SENSITRON**  
**SEMICONDUCTOR**

**1N3595-1, 1N3595US-1**  
**VF CONTROLLED DIODE**

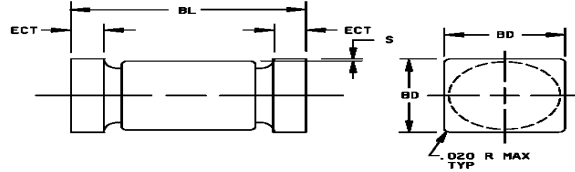
**TECHNICAL DATA**  
**DATA SHEET 5086, REV. A.1**

**PACKAGE DIMENSIONS (inches/mm)**

**AXIAL**



**MELF (Add "US")**



**1N3595, 1N3595US-1**

PACKAGE STYLE	DIMENSIONS - INCHES ( MILLIMETERS)			
	$\phi B$	$\phi D$	G	L
DO-35	.018/.022 0.46/0.56	.056/.080 1.42/2.03	.130/.180 3.30/4.57	1.00/1.5 25.4/38.10

**1N3595, 1N3595US-1**

PACKAGE STYLE	DIMENSIONS - INCHES ( MILLIMETERS)			
	BL	BD	S	ECT
D-5D	.165/.195 4.19/4.95	.070/.085 1.78/2.16	0.003 Min	.019/.028 0.48/0.71

**PART ORDERING INFORMATION:**

The following part numbers can be purchased in either axial or surface mount devices and screened and tested to the military screening flow. The parts are marked in accordance with the testing performed, example:

Sensitron Screening Level	*Part Number-- Leaded Package (example for 1N3595-1)	*Part Number-- Surface Mount Package (example for 1N3595-1US)
<b>1N</b>	1N3595-1	1N3595US-1
<b>JAN</b>	JAN1N3595-1	JAN1N3595US-1
<b>SJ</b>	SJ3595-1	SJ3595US-1
<b>JANTX</b>	JANTX1N3595-1	JANTX1N3595US-1
<b>SX</b>	SX3595-1	SX3595US-1
<b>JANTXV</b>	JANTXV1N3595-1	JANTXV1N3595US-1
<b>SV</b>	SV3595-1	SV3595US-1
<b>JANS</b>	JANS1N3595-1	JANS1N3595US-1
<b>SS</b>	SS3595-1	SS3595US-1

\*Parts can also be ordered Tape & Reel

**DISCLAIMER:**

- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
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