

1N3595-1, 1N3595US-1

VF CONTROLLED DIODE

TECHNICAL DATA DATA SHEET 5086, REV. A.1

AVAILABLE AS
1N, JAN, JANTXV
JANS
JAN EQUIVALENT*
SJ*, SX*, SV*, SS*

V_F 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_F

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_R

ELECTRICAL CHARACTERISTICS:

| Туре | V _R | Io | I _{FSM} Tp=1s | T _{STG} , T _J | R _{θJL} L=.375 | R _{θJEC} L=0 | $R_{\theta JX}$ |
|-----------------------|----------------|-----|---------------------------|-----------------------------------|----------------------------|--------------------------|-----------------|
| | 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 $T_A = +25$ °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.

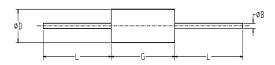
1N3595-1, 1N3595US-1

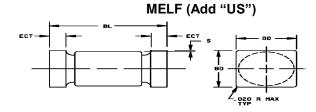
VF CONTROLLED DIODE

TECHNICAL DATA DATA SHEET 5086, REV. A.1

PACKAGE DIMENSIONS (inches/mm)

AXIAL





1N3595, 1N3595US-1

| PACKAGE | DIMENSION | S - INCHES | (MILLIMETE | ERS) |
|---------|-----------|------------|-------------|------------|
| STYLE | φВ | φD | G | Ш |
| | .018/.022 | .056/.080 | .130/.180 | 1.00/1.5 |
| DO-35 | 0.46/0.56 | 1.42/2.03 | 3.30/4.57 | 25.4/38.10 |
| | | | | |

1N3595, 1N3595US-1

| PACKAGE | DIMENSIO | NS - INCHES | (MILLI | METERS) |
|---------|-----------|-------------|---------|-----------|
| STYLE | BL | BD | S | ECT |
| | .165/.195 | .070/.085 | 0.003 | .019/.028 |
| D-5D | 4.19/4.95 | 1.78/2.16 | Min | 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) |
|---------------------------|--|---|
| 1N | 1N3595-1 | 1N3595US-1 |
| JAN | JAN1N3595-1 | JAN1N3595US-1 |
| SJ | SJ3595-1 | SJ3595US-1 |
| JANTX | JANTX1N3595-1 | JANTX1N3595US-1 |
| SX | SX3595-1 | SX3595US-1 |
| JANTXV | JANTXV1N3595-1 | JANTXV1N3595US-1 |
| sv | SV3595-1 | SV3595US-1 |
| JANS | JANS1N3595-1 | JANS1N3595US-1 |
| SS | SS3595-1 | SS3595US-1 |

^{*}Parts can also be ordered Tape & Reel

DISCLAIMER:

- 1- 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).
- 2- 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.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.