

GSD620CT Series

Surface Mount Schottky Barrier Rectifiers

Product Description

Reverse Voltage 20V TO 200V Forward Current 6.0A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound
- For surface mounted applications
- Exceeds environmental standards of MIL-S-19500 / 228
- Low leakage current
- Lead(Pb)-Free

Mechanical Data

- Case : Molded plastic, TO-252 / DPAK
- Terminals : Solder plated , solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by marking
- Mounting Position : Any
- Weight : 0.34 grams

Packages

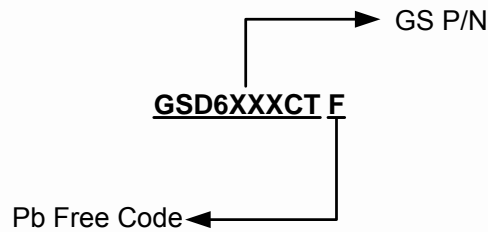


D-PAK (TO-252)

Marking Information

| Part Number | Package | Marking |
|-------------|----------------|---------|
| GSD620CTF | D-PAK (TO-252) | SK620 |
| GSD630CTF | D-PAK (TO-252) | SK630 |
| GSD640CTF | D-PAK (TO-252) | SK640 |
| GSD650CTF | D-PAK (TO-252) | SK650 |
| GSD660CTF | D-PAK (TO-252) | SK660 |
| GSD680CTF | D-PAK (TO-252) | SK680 |
| GSD6100CTF | D-PAK (TO-252) | SK6100 |
| GSD6150CTF | D-PAK (TO-252) | SK6150 |
| GSD6200CTF | D-PAK (TO-252) | SK6200 |

Ordering Information



| Part Number | Package | Quantity |
|------------------|----------------|----------|
| GSD620CTF Series | D-PAK (TO-252) | 2500 PCS |

Electrical Characteristics

(T_A=25°C unless otherwise noted)

| Symbol | Conditions | 20 | 30 | 40 | 50 | 60 | Unit |
|--------------------|--|-----------------------|-----|------|------|------|------|
| V _{RRM} | Repetitive Peak Reverse Voltage | 20 | 30 | 40 | 50 | 60 | V |
| V _{RMS} | Maximum RMS Voltage | 14 | 21 | 28 | 35 | 42 | V |
| V _R | Continuous Reverse Voltage | 20 | 30 | 40 | 50 | 60 | V |
| V _F | Maximum Forward Voltage @ I _F =5.0A | 0.55 | | 0.75 | | | V |
| Symbol | Conditions | 80 | 100 | 150 | 200 | Unit | |
| V _{RRM} | Repetitive Peak Reverse Voltage | 80 | 100 | 150 | 200 | V | |
| V _{RMS} | Maximum RMS Voltage | 56 | 70 | 105 | 140 | V | |
| V _R | Continuous Reverse Voltage | 80 | 100 | 150 | 200 | V | |
| V _F | Maximum Forward Voltage @ I _F =5.0A | 0.85 | | 1.0 | | V | |
| I _R | Maximum DC Reverse Current At Rated DC Blocking Voltage | T _A =25°C | 0.5 | | | mA | |
| | | T _A =100°C | 20 | | | | |
| I _{F(AV)} | Forward Rectified Current (Fig.1) | 6.0 | | | A | | |
| I _{FSM} | Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load | 75 | | | A | | |
| R _{θJC} | Thermal Resistance Junction to case | 5.0 | | | °C/W | | |
| T _J | Junction Temperature Range | -55 to +125 | | | °C | | |
| T _{STG} | Storage Temperature Range | -55 to +150 | | | °C | | |

Typical Characteristics

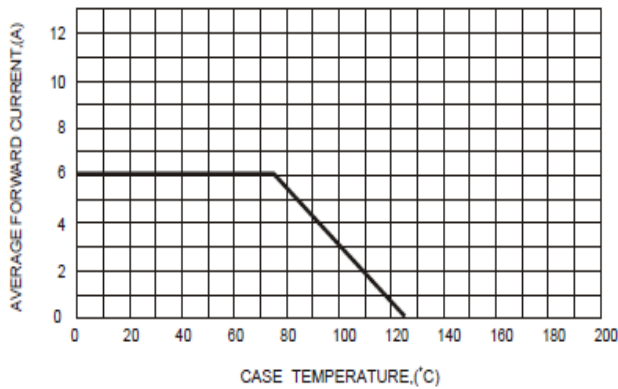


FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

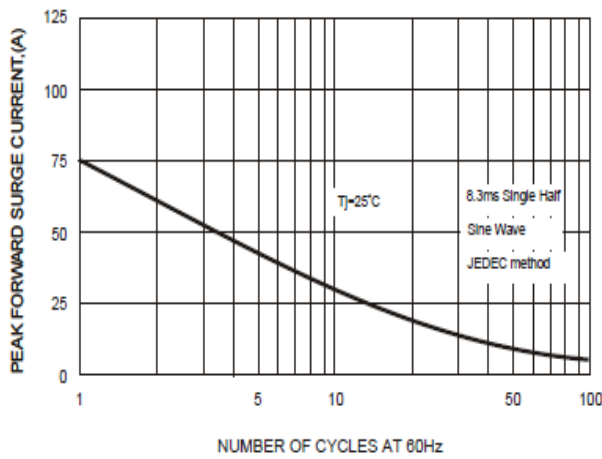


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

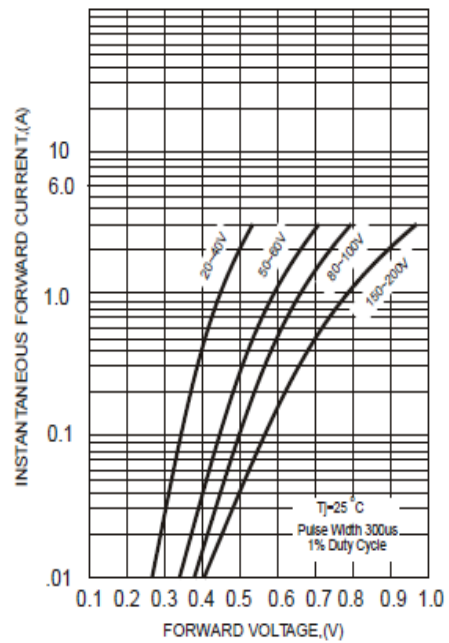


FIG.2-TYPICAL FORWARD CHARACTERISTICS

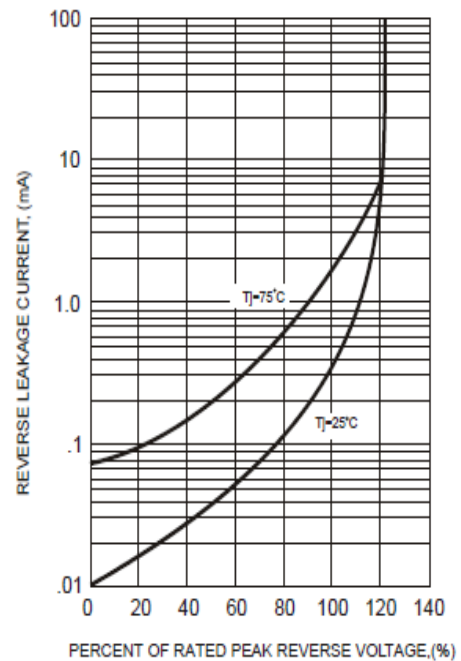
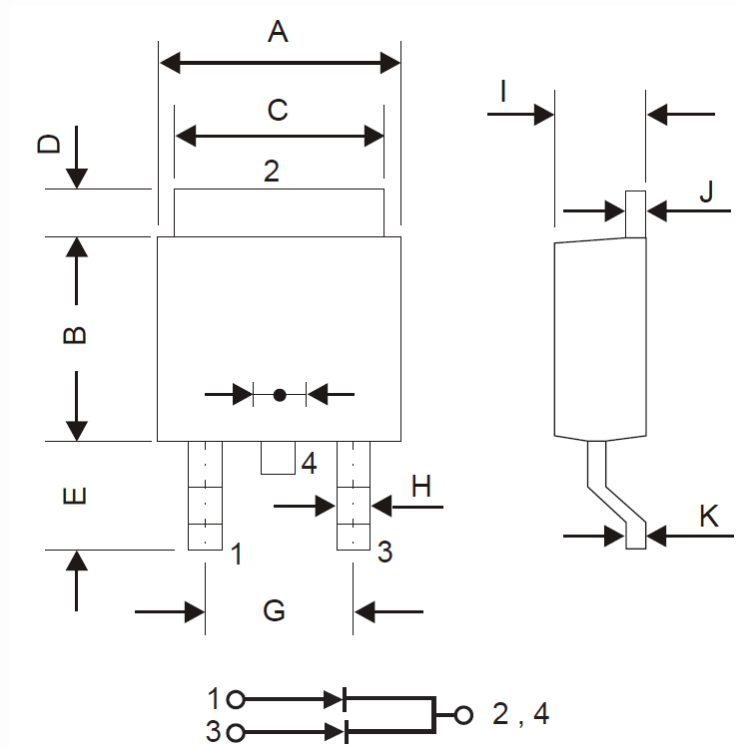


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

Package Dimension

D-PAK (TO-252)





| Dimensions | | | | |
|------------|-------------|------|--------|-------|
| Symbol | Millimeters | | Inches | |
| | Min | Max | Min | Max |
| A | 6.30 | 6.70 | 0.248 | 0.263 |
| B | 5.80 | 6.20 | 0.228 | 0.244 |
| C | 5.10 | 5.50 | 0.200 | 0.216 |
| D | 0.80 | 1.00 | 0.033 | 0.039 |
| E | 2.50 | 2.90 | 0.098 | 0.114 |
| G | 4.30 | 4.70 | 0.169 | 0.185 |
| H | 0.08 | 1.00 | 0.003 | 0.039 |
| I | 2.10 | 2.50 | 0.082 | 0.098 |
| J | 0.40 | 0.60 | 0.015 | 0.023 |
| K | 0.40 | 0.60 | 0.015 | 0.023 |

NOTICE

Information furnished is believed to be accurate and reliable. However Globaltech Semiconductor assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties, which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Globaltech Semiconductor. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information without express written approval of Globaltech Semiconductor.

CONTACT US

| GS Headquarter | |
|---|--|
|  | 4F.,No.43-1,Lane11,Sec.6,Minquan E.Rd Neihu District Taipei City 114, Taiwan (R.O.C) |
|  | 886-2-2657-9980 |
|  | 886-2-2657-3630 |
|  | sales_twn@gs-power.com |

| Wu-Xi Branch | |
|---|--|
|  | No.21 Changjiang Rd., WND, Wuxi, Jiangsu, China (INFO. & TECH. Science Park Building A 210 Room) |
|  | 86-510-85217051 |
|  | 86-510-85211238 |
|  | sales_cn@gs-power.com |

| RD Division | |
|---|--------------------------------------|
|  | 824 Bolton Drive Milpitas. CA. 95035 |
|  | 1-408-457-0587 |