

■ Features

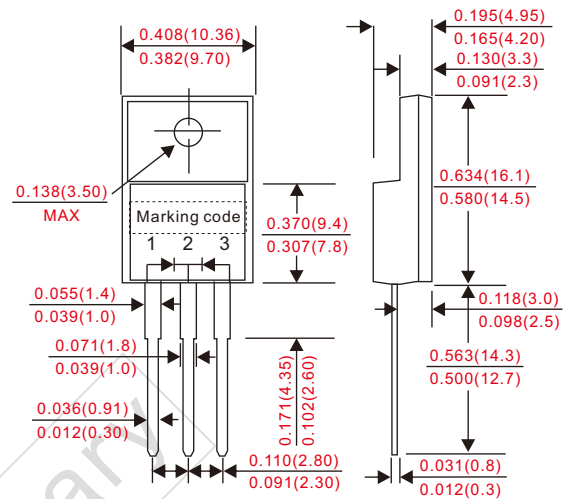
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex. CSF10L150CTG-A.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

- Epoxy : UL94-V0 rated flame retardant.
- Case : JEDEC ITO-220AB molded plastic body over passivated chip.
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed.
- Polarity: Color band denotes cathode end.
- Mounting Position : Any.
- Weight : Approximated 2.25 gram.

■ Outline

ITO-220AB



■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Parameter | Conditions | Symbol | CSF10L150CT-A | UNIT |
|---------------------------------------|--|----------------|---------------|------|
| Marking code | | | CSF10L150CT | |
| Peak repetitive reverse voltage | | V_{RRM} | | |
| Working peak reverse voltage | | V_{RWM} | 150 | V |
| DC blocking voltage | | V_{RM} | | |
| Forward rectified current | | I_O | 10 | A |
| Forward surge current | 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I_{FSM} | 150 | A |
| Peak repetitive reverse surge current | 2us - 1kHz | I_{RRM} | 1 | A |
| Thermal resistance(1) | Junction to case | R_{BJC} | 4 | °C/W |
| Operating and Storage temperature | | T_J, T_{STG} | -65 ~ +175 | °C |

| Parameter | Conditions | Symbol | MIN. | TYP. | MAX. | UNIT |
|----------------------|------------------------------------|--------|------|------|------|------|
| Forward voltage drop | $I_F = 5A, T_J = 25^\circ C$ | V_F | | | 840 | mV |
| | $I_F = 5A, T_J = 125^\circ C$ | | | 650 | 740 | |
| Reverse current | $V_R = V_{RRM}, T_J = 25^\circ C$ | I_R | | | 0.1 | mA |
| | $V_R = V_{RRM}, T_J = 125^\circ C$ | | | | 10 | |

Note : 1. Thermal resistance from junction to case per leg, with heatsink size(1.35" x 0.95" x 0.18") Al-plate.

Rating and characteristic curves

Fig.1 - Forward Current Derating Curve

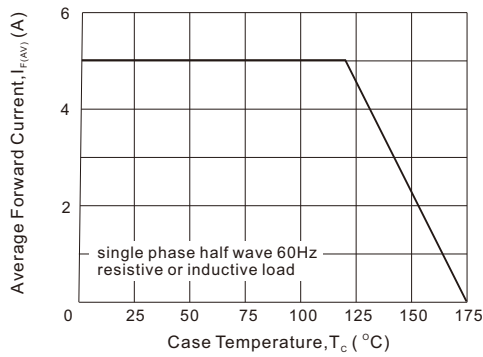


Fig. 2 - Instantaneous Forward Characteristics

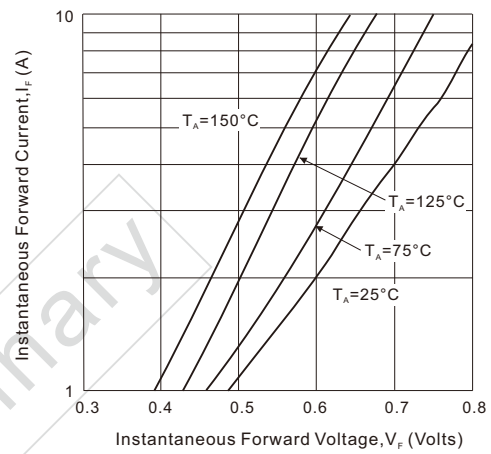
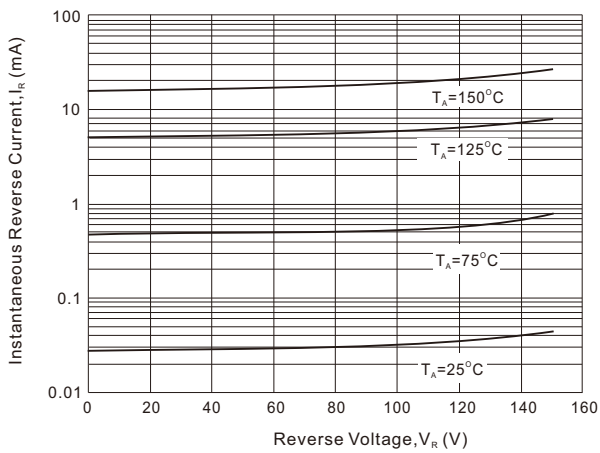


Fig. 3 - Reverse Characteristics



- CITC reserves the right to make changes to this document and its products and specifications at any time without notice.
- Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- CITC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does CITC assume any liability for application assistance or customer product design.
- CITC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.
- No license is granted by implication or otherwise under any intellectual property rights of CITC.
- CITC products are not authorized for use as critical components in life support devices or systems without express written approval of CITC.

Preliminary