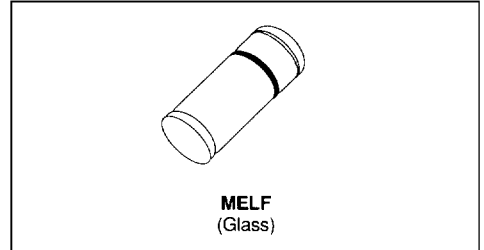


SMALL SIGNAL SCHOTTKY DIODE

DESCRIPTION

General purpose metal to silicon diode featuring very low turn-on voltage and fast switching.

This device has integrated protection against excessive voltage such as electrostatic discharges.

ABSOLUTE RATINGS (limiting values)

| Symbol | Parameter | | Value | Unit |
|--------------------|---|--|----------------------------|--------------------------------------|
| V_{RRM} | Repetitive Peak Reverse Voltage | | 80 | V |
| I_F | Forward Continuous Current | $T_j = 70^\circ\text{C}$ | 500 | mA |
| I_{FRM} | Repetitive Peak Forward Current | $t_p = 1\text{s}$ $\delta \leq 0.5$ | 3 | A |
| I_{FSM} | Surge non Repetitive Forward Current | $t_p = 10\text{ms}$ | 10 | A |
| T_{stg} T_j | Storage and Junction Temperature Range | | - 65 to 150 - 65 to 125 | $^\circ\text{C}$ $^\circ\text{C}$ |
| T_L | Maximum Temperature for Soldering during 15 s | | 260 | $^\circ\text{C}$ |

THERMAL RESISTANCE

| Symbol | Parameter | Value | Unit |
|---------------|----------------|-------|---------------------------|
| $R_{th(j-l)}$ | Junction-leads | 110 | $^\circ\text{C}/\text{W}$ |

ELECTRICAL CHARACTERISTICS
STATIC CHARACTERISTICS

| Symbol | Test Conditions | | Min. | Typ. | Max. | Unit |
|---------|--------------------------|----------------------|------|------|------|---------------|
| I_R^* | $T_j = 25^\circ\text{C}$ | $V_R = 80\text{V}$ | | | 200 | μA |
| V_F^* | $T_j = 25^\circ\text{C}$ | $I_F = 10\text{mA}$ | | | 0.32 | V |
| | $T_j = 25^\circ\text{C}$ | $I_F = 100\text{mA}$ | | | 0.42 | |
| | $T_j = 25^\circ\text{C}$ | $I_F = 1\text{A}$ | | | 1 | |

DYNAMIC CHARACTERISTICS

| Symbol | Test Conditions | | Min. | Typ. | Max. | Unit |
|--------|--------------------------|-------------------|------|------|------|-------------|
| C | $T_j = 25^\circ\text{C}$ | $f = 1\text{MHz}$ | | 120 | | pF |
| | | $V_R = 0\text{V}$ | | 35 | | |
| | | $V_R = 5\text{V}$ | | | | |

* Pulse test : $t_p \leq 300\mu\text{s}$ $\delta < 2\%$.

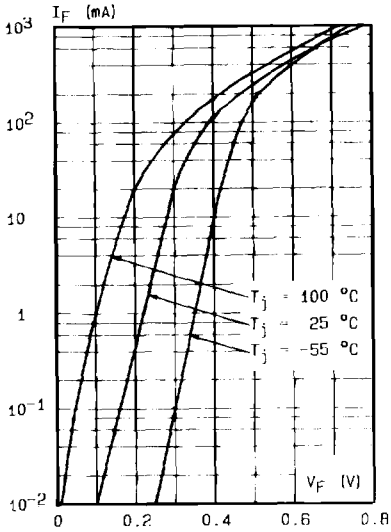


Fig.1 - Forward current versus forward voltage at low level (typical values).

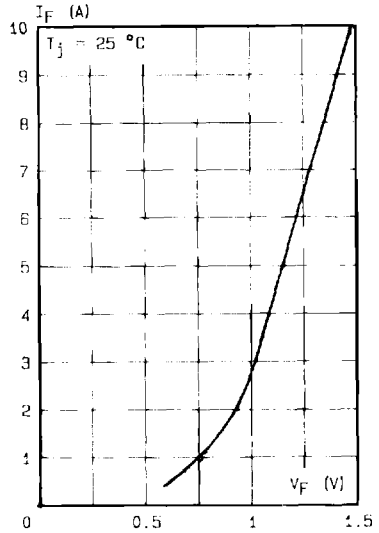


Fig.2 - Forward current versus forward voltage at high level (typical values).

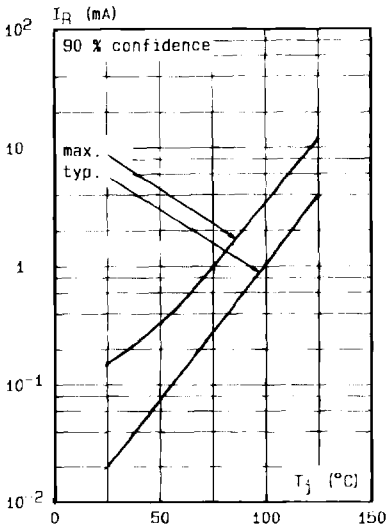


Fig.3 - Reverse current versus junction temperature.

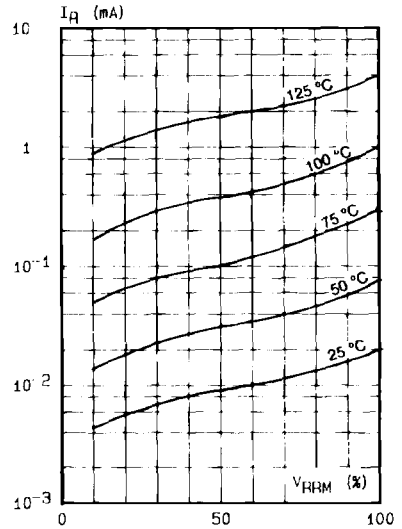


Fig.4 - Reverse current versus V_{RRM} in per cent.

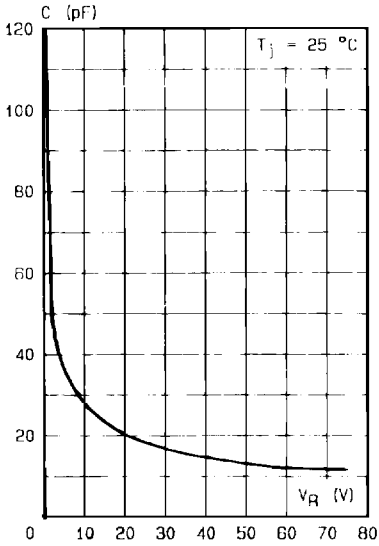


Fig.5 - Capacitance C versus reverse applied voltage V_R (typical values).

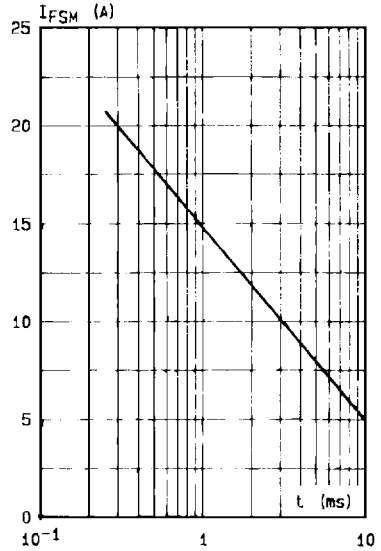


Fig.6 - Surge non repetitive forward current for a rectangular pulse with $t \leq 10$ ms.

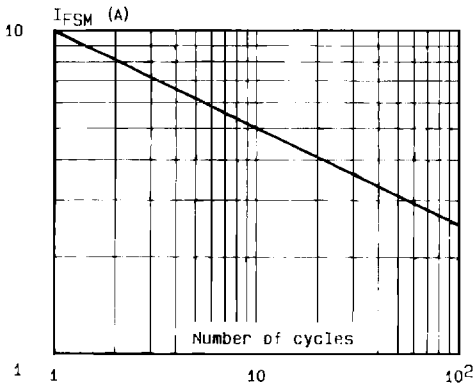
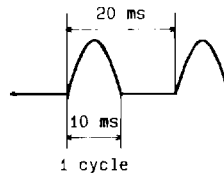
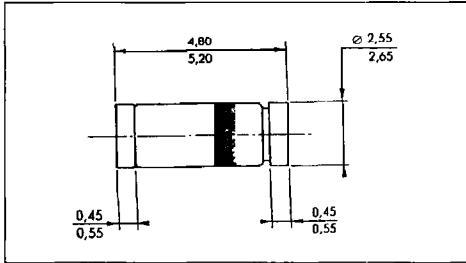


Fig.7 - Surge non repetitive forward current versus number of cycles.



PACKAGE MECHANICAL DATA

MELF Glass



Marking : ring at cathode end.
Weight : 0.15g

FOOT PRINT DIMENSIONS (millimeter)

