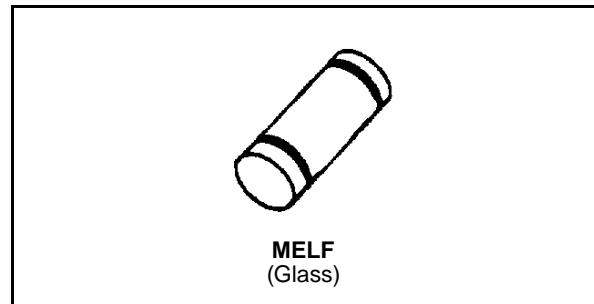




SMALL SIGNAL SCHOTTKY DIODE

**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 MAXIMUM RATINGS** (limiting values)

Symbol	Parameter	Value	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage	80	V
$I_F$	Forward Continuous Current	$T_j = 70\text{ }^\circ\text{C}$	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 15s	260	$^\circ\text{C}$

**THERMAL RESISTANCE**

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

**ELECTRICAL CHARACTERISTICS**

STATIC CHARACTERISTICS

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

DYNAMIC CHARACTERISTICS

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

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

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

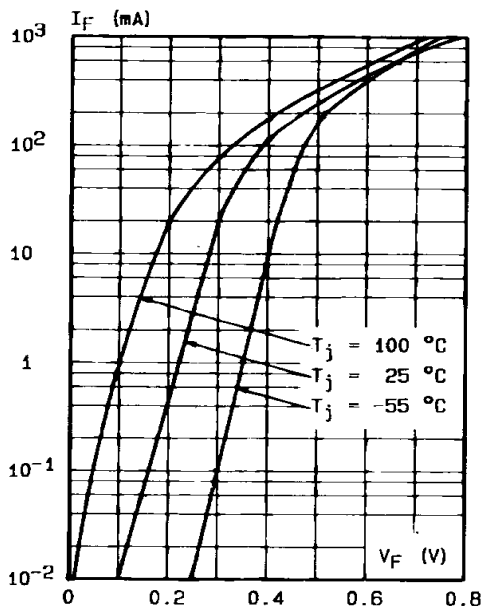


Figure 2. Forward current versus forward voltage at high level (typical values).

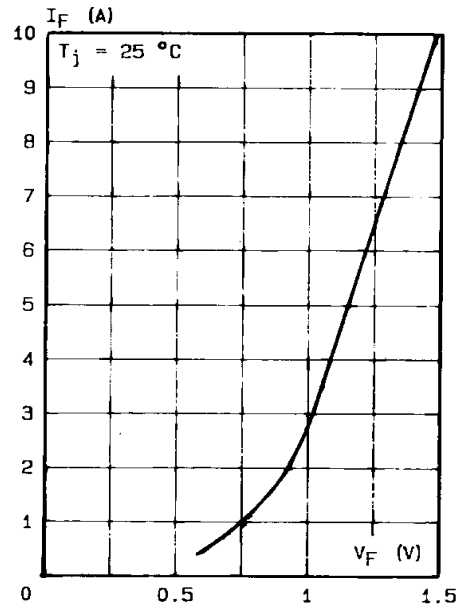


Figure 3. Reverse current versus junction temperature.

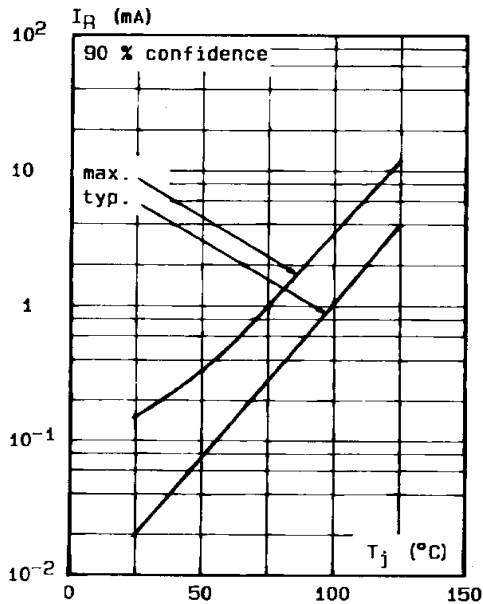


Figure 4. Reverse current versus  $V_{RRM}$  in per cent.

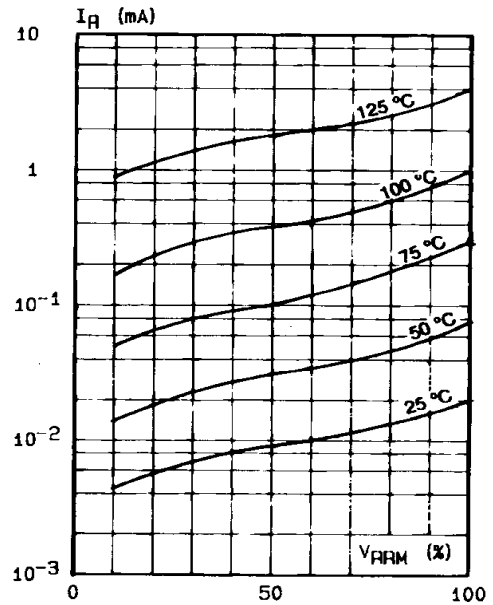


Figure 5. Capacitance C versus reverse applied voltage  $V_R$  (typical values).

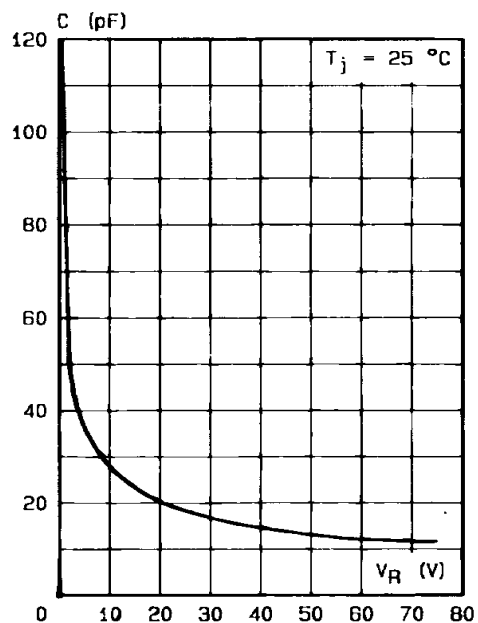


Figure 6. Surge non repetitive forward current for a rectangular pulse with  $t \leq 10$  ms.

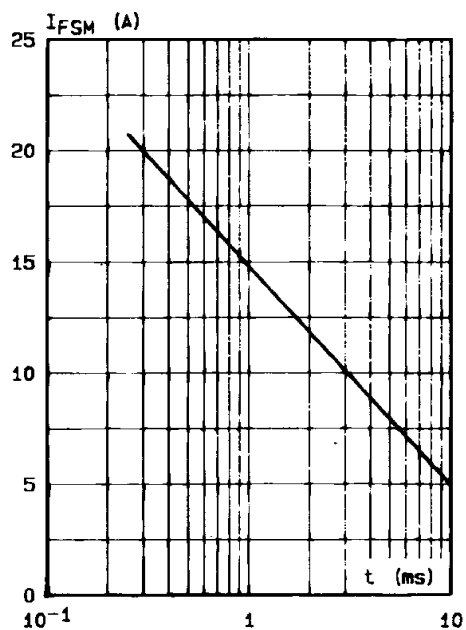
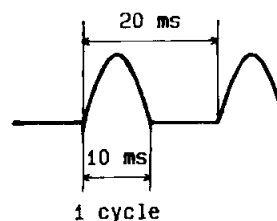
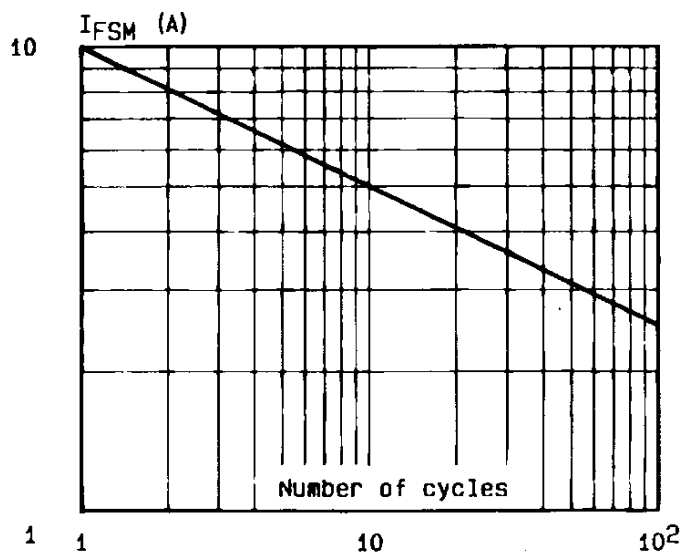
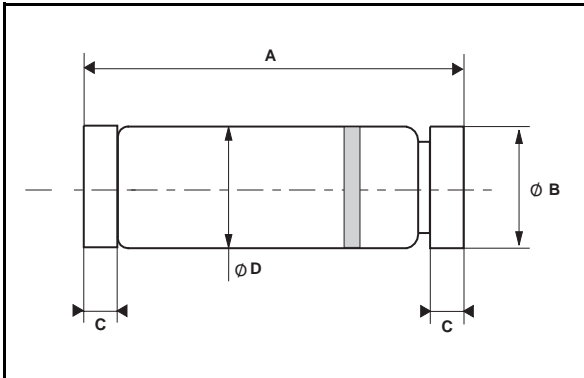


Figure 7. - Surge non repetitive forward current versus number of cycles.



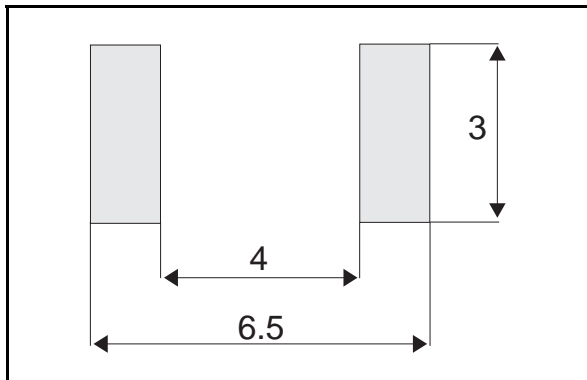
PACKAGE MECHANICAL DATA

MELF Glass



REF.	DIMENSIONS					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.80		5.20	0.189		0.205
Ø B	2.50		2.65	0.098		0.104
C	0.45		0.60	0.018		0.024
Ø D		2.50			0.098	

FOOT PRINT DIMENSIONS (Millimeter)



Marking: ring at cathode end.  
Weight: 0.15g

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