



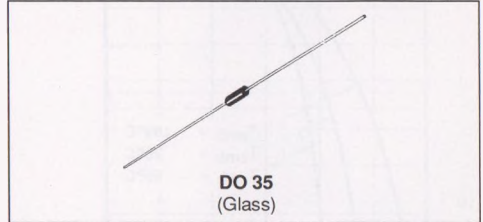
**SMALL SIGNAL SCHOTTKY DIODE**

**DESCRIPTION**

Metal to silicon junction diode featuring high breakdown, low turn-on voltage and ultrafast switching.

Primarily intended for high level UHF/VHF detection and pulse application with broad dynamic range.

Matched batches are available on request.



**ABSOLUTE RATINGS** (limiting values)

Symbol	Parameter		Value	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage		70	V
$I_F$	Forward Continuous Current*	$T_a = 25^\circ\text{C}$	15	mA
$P_{Tot}$	Power Dissipation*	$T_a = 25^\circ\text{C}$	430	mW
$T_{stg}$ $T_j$	Storage and Junction Temperature Range		- 65 to 200	$^\circ\text{C}$
$T_L$	Maximum Lead Temperature for Soldering during 10s at 4mm from Case		230	$^\circ\text{C}$

**THERMAL RESISTANCE**

Symbol	Test Conditions	Value	Unit
$R_{th(j-a)}$	Junction-ambient*	400	$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS**

**STATIC CHARACTERISTICS**

Symbol	Test Conditions		Min.	Typ.	Max.	Unit
$V_{(BR)}$	$T_{amb} = 25^\circ\text{C}$	$I_R = 10\mu\text{A}$	70			V
$V_F^{**}$	$T_{amb} = 25^\circ\text{C}$	$I_F = 1\text{mA}$			0.41	V
	$T_{amb} = 25^\circ\text{C}$	$I_F = 15\text{mA}$			1	
$I_R^{**}$	$T_{amb} = 25^\circ\text{C}$	$V_R = 50\text{V}$			0.2	$\mu\text{A}$

**DYNAMIC CHARACTERISTICS**

Symbol	Test Conditions			Min.	Typ.	Max.	Unit
C	$T_{amb} = 25^\circ\text{C}$	$V_R = 0\text{V}$	$f = 1\text{MHz}$			2	pF
$\tau$	$T_{amb} = 25^\circ\text{C}$	$I_F = 5\text{mA}$	Krakauer Method			100	ps

\* On infinite heatsink with 4mm lead length

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

Matched batches available on request. Test conditions (forward voltage and/or capacitance) according to customer specification.

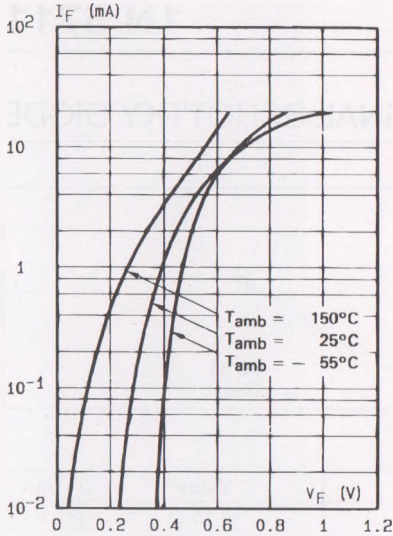


Fig.1 - Forward current versus forward voltage at low level (typical values).

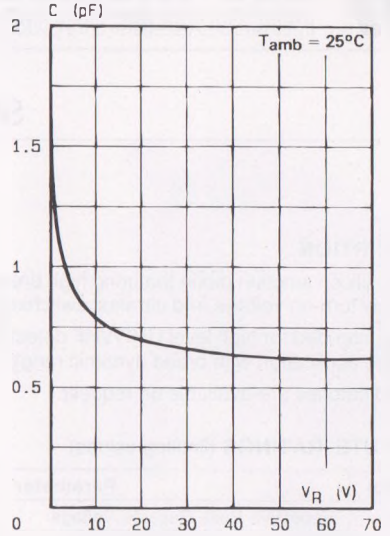


Fig.2 - Capacitance  $C$  versus reverse applied voltage  $V_R$  (typical values).

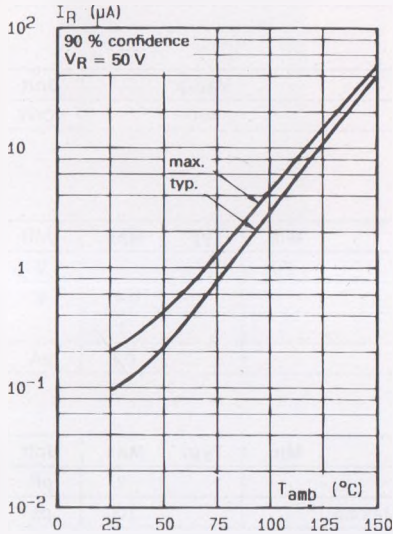


Fig.3 - Reverse current versus ambient temperature.

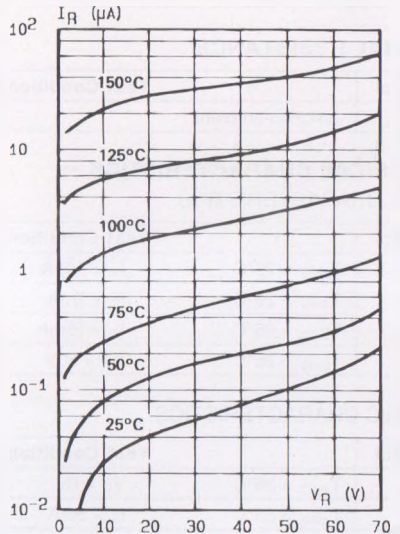


Fig.4 - Reverse current versus continuous reverse voltage (typical values).