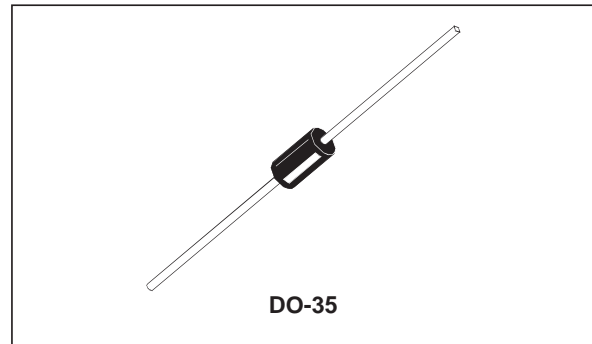


## SMALL SIGNAL SCHOTTKY DIODE

### 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.



### ABSOLUTE RATINGS (limiting values)

Symbol	Parameter		Value	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage		60	V
$I_F$	Forward Continuous Current*	$T_a = 25^\circ\text{C}$	15	mA
$I_{FSM}$	Surge non Repetitive Forward Current*	$t_p \leq 1\text{s}$	50	mA
$T_{stg}$ $T_j$	Storage and Junction Temperature Range		- 65 to 200 - 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
$V_{BR}$	$T_{amb} = 25^\circ\text{C}$	$I_R = 10\mu\text{A}$	60			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

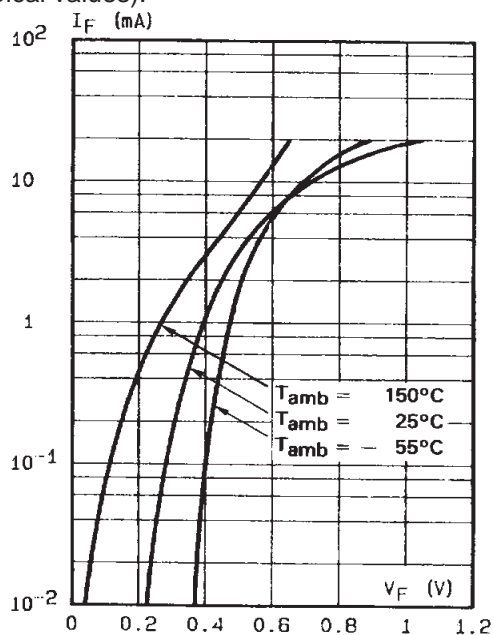
Symbol	Test Conditions			Min.	Typ.	Max.	Unit
C	$T_{amb} = 25^\circ\text{C}$	$V_R = 0\text{V}$	$f = 1\text{MHz}$			2.2	pF
$\tau$	$T_{amb} = 25^\circ\text{C}$	$I_F = 5\text{mA}$	Krakauer Method			100	ps

\* On infinite heatsink with 4mm lead length

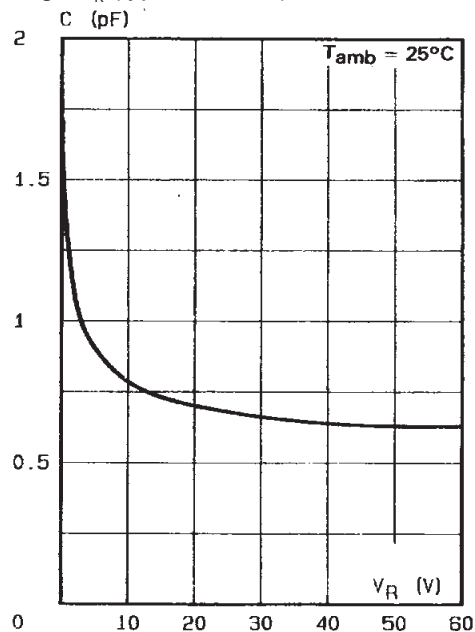
\*\* Pulse test:  $t_p \leq 300\mu\text{s}$   $\delta < 2\%$ .

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

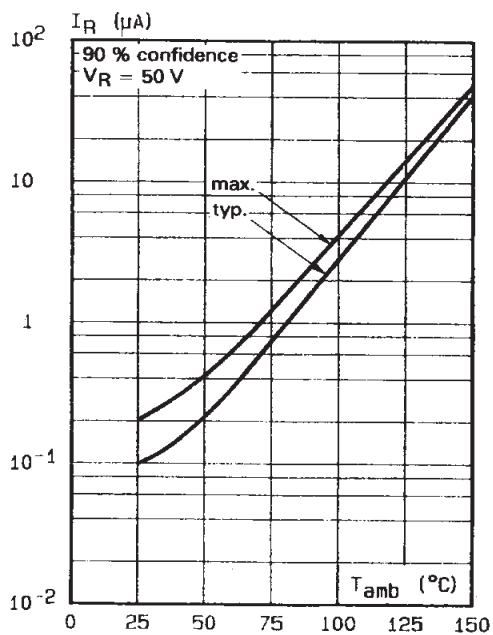
**Fig. 1:** Forward current versus forward voltage (typical values).



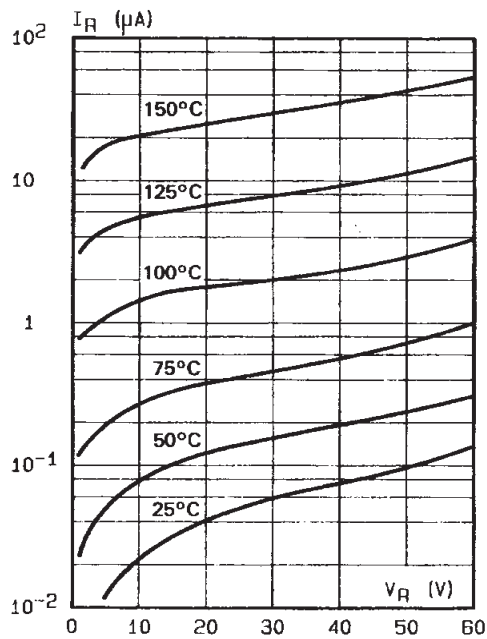
**Fig. 2:** Capacitance  $C$  versus reverse applied voltage  $V_R$  (typical values).



**Fig. 3:** Reverse current versus ambient temperature.



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



**PACKAGE MECHANICAL DATA**

DO-35

REF.	DIMENSIONS			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.05	4.50	0.120	0.177
B	1.53	2.00	0.060	0.079
C	28.00		1.102	
D	0.458	0.558	0.018	0.022

Cooling method : by convection and conduction  
 Marking: clear, ring at cathode end.  
 Weight: 0.15g

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