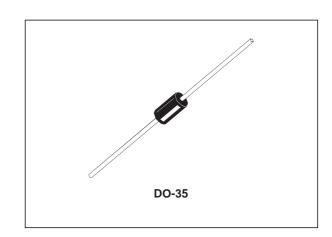


# SMALL SIGNAL SCHOTTKY DIODE



### **DESCRIPTION**

General purpose, metalto silicon diode featuring high breakdown voltage low turn-on voltage.

### **ABSOLUTE RATINGS** (limiting values)

Symbol	Parameter	Value	Unit	
$V_{RRM}$	Repetitive Peak Reverse Voltage		100	V
$I_{F}$	Forward Continuous Current*	T <sub>a</sub> = 25°C	150	mA
I <sub>FRM</sub>	Repetitive Peak Forward Current* $ \begin{array}{c} t_p \leq 1s \\ \delta \leq 0.5 \end{array} $		350	mA
I <sub>FSM</sub>	Surge non Repetitive Forward Current*	non Repetitive Forward Current* $t_p = 10 ms$		mA
P <sub>tot</sub>	Power Dissipation* T <sub>I</sub> = 80°C		150	mW
T <sub>stg</sub> T <sub>j</sub>	Storage and Junction Temperature Range	- 65 to + 150 - 65 to + 125	°C	
TL	Maximum Temperature for Soldering during Case	230	°C	

#### THERMAL RESISTANCE

Symbol	Test Conditions	Value	Unit
R <sub>th(j-a)</sub>	Junction-ambient*	300	°C/W

<sup>\*</sup> On infinite heatsink with 4mm lead length.

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### **ELECTRICAL CHARACTERISTICS**

## STATIC CHARACTERISTICS

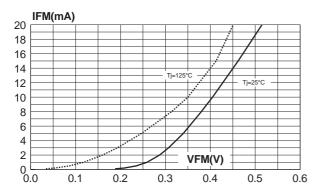
Symbol	Test Conditions		Min.	Тур.	Max.	Unit
V <sub>BR</sub>	T <sub>j</sub> = 25°C	$I_R = 100 \mu A$	100			V
V <sub>F</sub> *	T <sub>j</sub> = 25°C	$I_F = 0.1 \text{mA}$			0.25	V
	T <sub>j</sub> = 25°C	$I_F = 10mA$			0.45	
	T <sub>j</sub> = 25°C	I <sub>F</sub> = 250mA			1	
I <sub>R</sub> *	T <sub>j</sub> = 25°C	V <sub>R</sub> = 1.5V			0.5	μΑ
	$T_j = 60$ °C				5	
	T <sub>j</sub> = 25°C	V <sub>R</sub> = 10V			0.8	
	T <sub>j</sub> = 60°C				7.5	
	T <sub>j</sub> = 25°C	V <sub>R</sub> = 50V			2	
	$T_j = 60$ °C				15	
	T <sub>j</sub> = 25°C	V <sub>R</sub> = 75V			5	
	$T_j = 60$ °C				20	

### **DYNAMIC CHARACTERISTICS**

Symbol	Test Conditions			Тур.	Max.	Unit
С	$T_j = 25$ °C $V_R = 0V$	f = 1Mhz		10		pF
	$T_j = 25$ °C $V_R = 1V$	1 - 11/11/2		6		

<sup>\*</sup> Pulse test:  $t_p \le 300 \mu s \ \delta < 2\%$ .

**Fig. 1-1:** Forward voltage drop versus forward current (low level, typical values)



1E-1

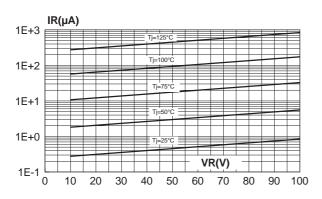
Fig. 1-2: Forward voltage drop versus forward cur-

rent (high level, typical values)

IFM(A)

5E-1

Fig. 2: Leakage current versus reverse voltage applied (typical values)



**Fig. 3:** Leakage current versus junction temperature (typical values)

1E-2 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2

VFM(V)

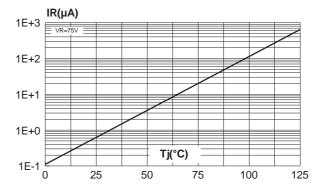
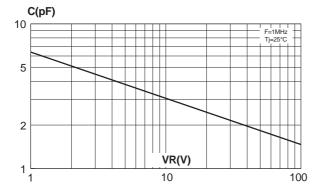


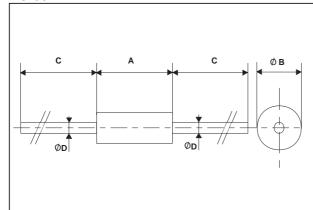
Fig. 4: Junction capacitance versus reverse voltage applied (typical values)



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#### PACKAGE MECHANICAL DATA

DO-35



REF.	DIMENSIONS			
	Millimeters		Inc	hes
	Min.	Max.	Min.	Max.
А	3.05	4.50	0.120	0.177
В	1.53	2.00	0.060	0.079
С	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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