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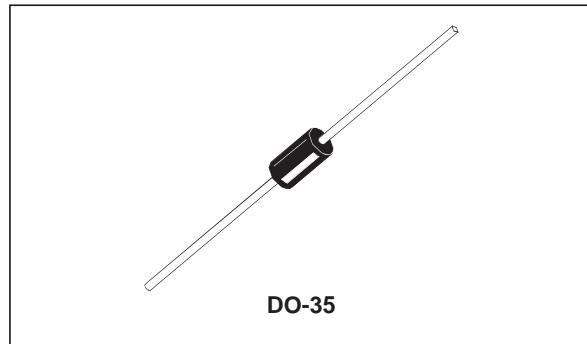
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Jameco Part Number 743710

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*	15	mA
I_{FSM}	Surge non Repetitive Forward Current*	50	mA
T_{stg} T_j	Storage and Junction Temperature Range	- 65 to 200 - 65 to 200	°C
T_L	Maximum Lead Temperature for Soldering during 10s at 4mm from Case	230	°C

THERMAL RESISTANCE

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

ELECTRICAL CHARACTERISTICS

STATIC CHARACTERISTICS

Symbol	Test Conditions	Min.	Typ.	Max.	Unit
V_{BR}	$T_{amb} = 25^\circ C$ $I_R = 10\mu A$	60			V
V_F **	$T_{amb} = 25^\circ C$ $I_F = 1mA$			0.41	V
	$T_{amb} = 25^\circ C$ $I_F = 15mA$			1	
I_R **	$T_{amb} = 25^\circ C$ $V_R = 50V$			0.2	μA

DYNAMIC CHARACTERISTICS

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

* On infinite heatsink with 4mm lead length

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

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).

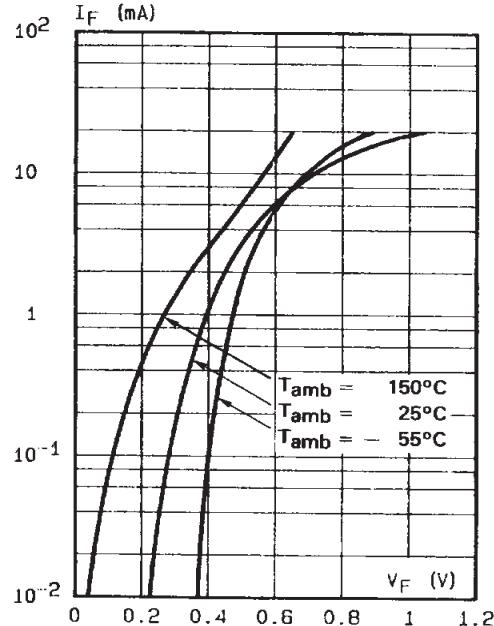


Fig. 2: Capacitance C versus reverse applied voltage V_R (typical values).

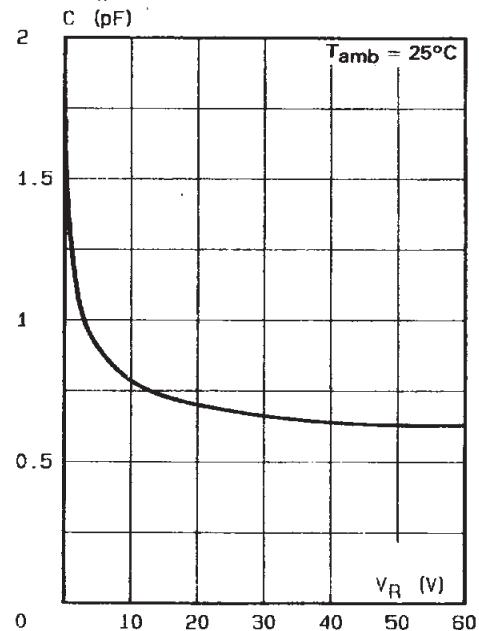


Fig. 3: Reverse current versus ambient temperature.

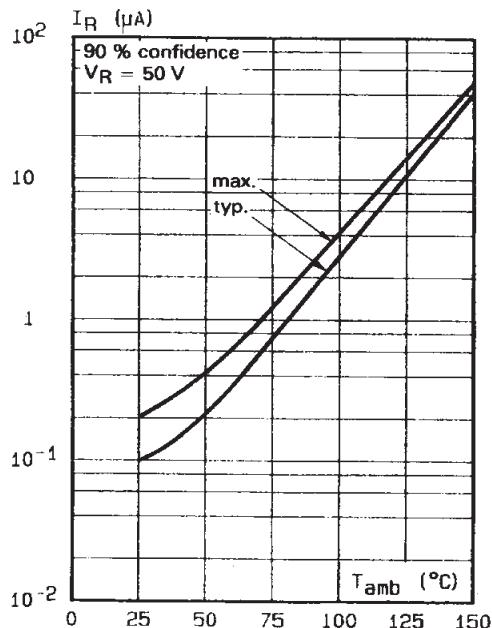
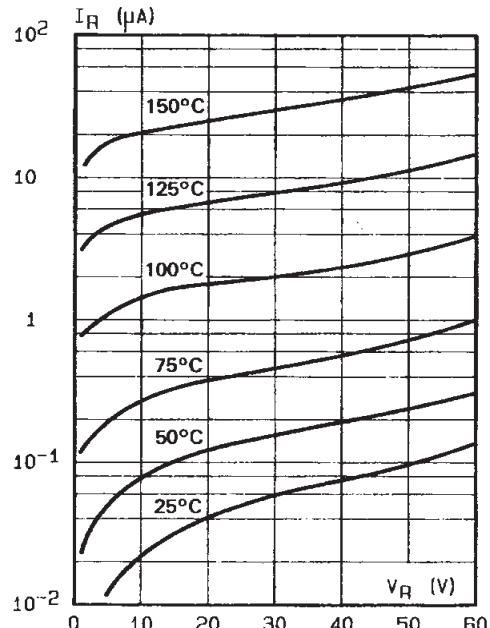


Fig. 4: Reverse current versus continuous reverse voltage (typical values).



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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