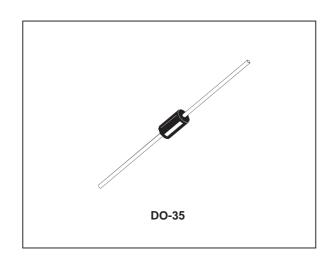


SMALL SIGNAL SCHOTTKY DIODES



DESCRIPTION

General purpose, metal to silicon diodes featuring very low turn-on voltage fast switching.

These devices have integrated protection against excessive voltage such as electrostatic dis-

ABSOLUTE RATINGS (limiting values)

Symbol	Parameter	Value	Unit	
V_{RRM}	Repetitive Peak Reverse Voltage	30	V	
I _F	Forward Continuous Current $T_a = 25^{\circ}C$		200	mA
I _{FRM}	$\begin{array}{ll} \text{Repetitive Peak Fordware Current} & & t_p \leq 1s \\ \delta \leq 0.5 & & \end{array}$		500	mA
I _{FSM}	Surge non Repetitive Forward Current* t _p = 10ms		4	А
P_{tot}	Power Dissipation*	200	mW	
$T_{stg} \\ T_{j}$	Storage and Junction Temperature Range	- 65 to +150 - 65 to +125	°C	
TL	Maximum Temperature for Soldering during 1 Case	230	°C	

THERMAL RESISTANCE

Symbol	Test Conditions	Value	Unit
R _{th(j-a)}	Junction-ambient*	300	°C/W

^{*} On infinite heatsink with 4mm lead length

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ELECTRICAL CHARACTERISTICS

STATIC CHARACTERISTICS

Symbol		Test Conditions	3	Min.	Тур.	Max.	Unit
V_{BR}	Tj = 25°C	$I_R = 100 \mu A$		30			V
V _F *	T _j = 25°C	$I_F = 200 \text{mA}$	All Types			1	V
	T _j = 25°C	$I_F = 10 \text{mA}$	BAT 42			0.4	
	T _j = 25°C	$I_F = 50 \text{mA}$				0.65	
	T _j = 25°C	$I_F = 2mA$	BAT 43	0.26		0.33	
	T _j = 25°C	$I_F = 15mA$				0.45	
I _R *	T _j = 25°C		V _R = 25V			0.5	μА
	T _j = 100°ÉC					100	

DYNAMIC CHARACTERISTICS

Symbol	Test Conditions		Тур.	Max.	Unit
С	$T_j = 25$ °C $V_R = 1$ V $f = 1$ MHz		7		pF
trr	$Tj = 25^{\circ}C$ $I_F = 10mA$ $I_R = 10mA$ $I_{rr} = 1mA$ $R_L = 100\Omega$			5	ns
h	$T_j = 25^{\circ}C$ $R_L = 15K\Omega$ $C_L = 300pF$ $f = 45MHz$ $V_i = 2V$	80			%

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

Fig. 1: Forward current versus forward voltage at different temperatures (typical values).

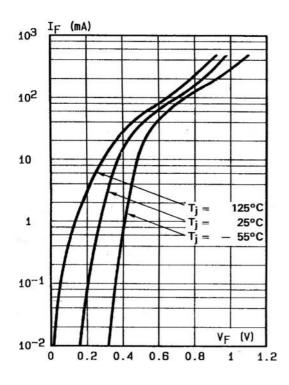
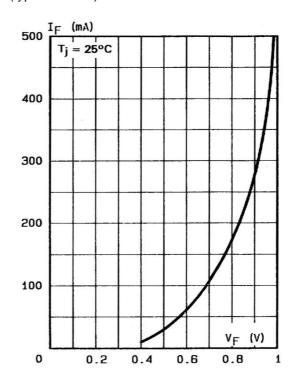


Fig. 2: Forward current versus forward voltage (typical values).



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

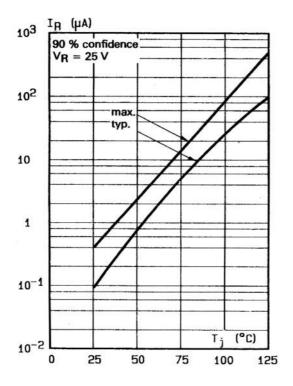


Fig. 4: Reverse current versus continuous reverse voltage.

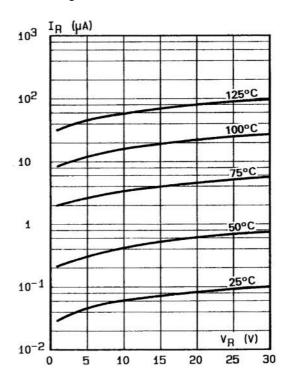
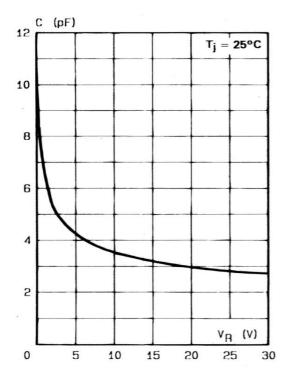


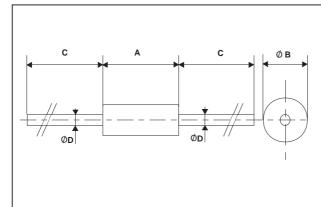
Fig. 5: Capacitance C versus reverse applied voltage $V_{\mbox{\tiny R}}$ (typical values).



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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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