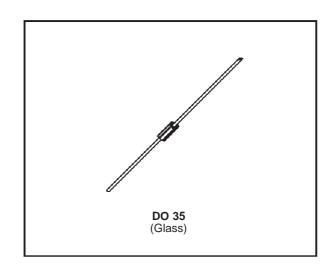


SMALL SIGNAL SCHOTTKY DIODES



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 discharges.

ABSOLUTE RATINGS (limiting values)

Symbol	Parameter	Value	Unit	
V_{RRM}	Repetitive Peak Reverse Voltage	30	V	
I _F	Forward Continuous Current $T_a = 25 ^{\circ}\text{C}$		200	mA
I _{FRM}	$\begin{array}{c} \text{Repetitive Peak Fordware Current} & t_p \leq 1s \\ \delta \leq 0.5 & \end{array}$		500	mA
I _{FSM}	Surge non Repetitive Forward Current* t	4	Α	
P _{tot}	Power Dissipation*	200	mW	
T _{stg} T _j	Storage and Junction Temperature Range	- 65 to +150 - 65 to +125	ပို ပို	
TL	Maximum Temperature for Soldering during 10s at	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			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	μΑ
	T _j = 100°C					100	

DYNAMIC CHARACTERISTICS

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

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

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

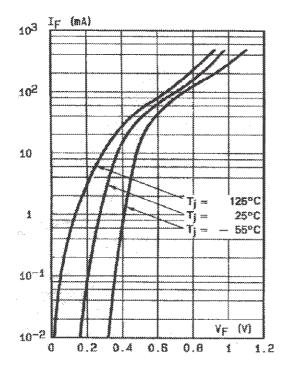
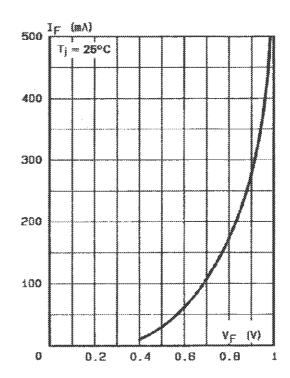


Figure 2. Forward current versus forward voltage (typical values).



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Figure 3. Reverse current versus junction temperature (typical values).

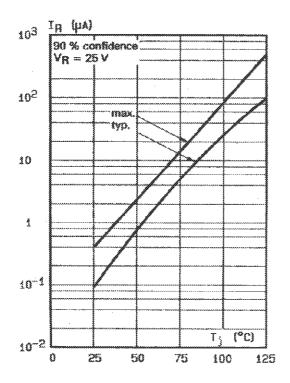


Figure 4. Reverse current versus continuous reverse voltage.

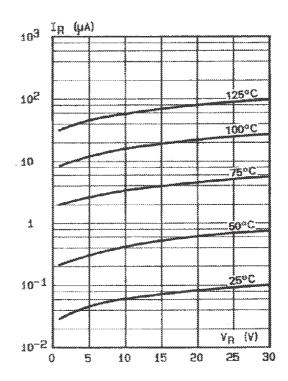
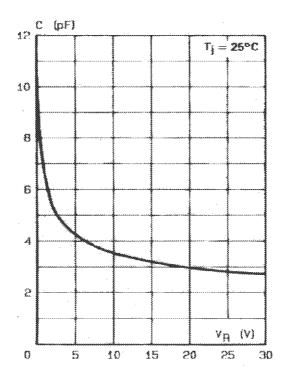
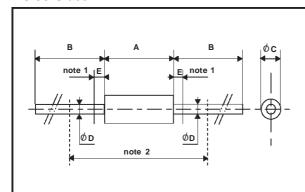


Figure 5. Capacitance C versus reverse applied voltage $V_{\mbox{\scriptsize R}}$ (typical values).



PACKAGE MECHANICAL DATA

DO 35 Glass



	DIMENSIONS				
REF.	Millimeters		Millimeters Inches		
	Min.	Max.	Min.	Max.	
А	3.05	4.50	0.120	0.177	
В	1.53	2.00	0.060	0.079	
С	12.7		0.500		
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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