

SURFACE MOUNT SMALL SIGNAL SCHOTTKY DIODES

VOLTAGE RANGE: 80 V CURRENT: 500mA

Features

- Small foot print, surface mountable
- Very low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability

Mechanical Data

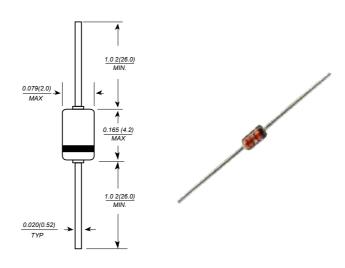
• Case: DO-35, glass case

Polarity: Color band denotes cathode

• Weight: 0.004 ounces, 0.13 grams



DO-35(GLASS)



Dimensions in millimeters

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	80	V
Forward Continuous Current* $T_a = 70 ^{\circ}\text{C}$	l _F	500	mA
$\begin{array}{ll} \text{Repetitive Peak Forward Current*} & t_p = 1s \\ \delta \leq 0.5 \end{array}$	I _{FRM}	3	А
Surge non Repetitive Forward Current* $t_p \le 10 \text{ms}$	I _{FSM}	10	Α
Storage and Junction Temperature Range	T _{stg}	- 65 to 150	°C
Clorage and canonom remperature realige	Tj	- 65 to 125	°C
Maximum Lead Temperature for Soldering during 10s at 4mm from Case	TL	230	°C

Symbol		Test Conditio	ns	Min.	Тур.	Max.	Unit
I _R * *	$T_j = 25^{\circ}C$	$V_{R} = 80V$				200	μΑ
V _F * *	$T_j = 25^{\circ}C$	$I_F = 10mA$				0.32	V
	T _j = 25°C	I _F = 100mA				0.42	
	T _j = 25°C	I _F = 1A				1	
Symbol	nbol Test Conditions		Min.	Тур.	Max.	Unit	
С	$T_j = 25^{\circ}C$	f = 1MHz	$V_R = 0V$		120		pF
			$V_R = 5V$		35		Pi



Figure 1. Forward current versus forward voltage at low level (typical values).

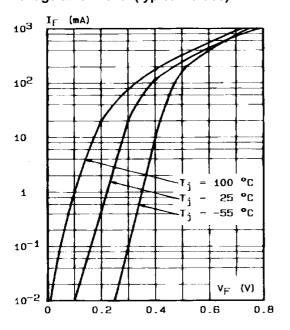


Figure 2. Forward current versus forward voltage at high level (typical values).

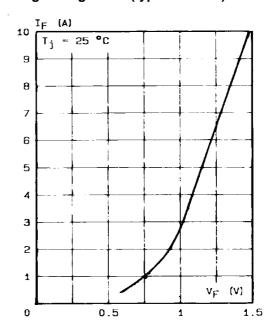


Figure 3. Reverse current versus junction temperature.

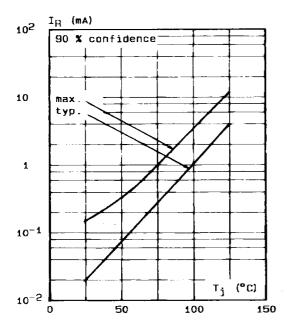


Figure 4. Reverse current versus V_{RRM} in per cent.

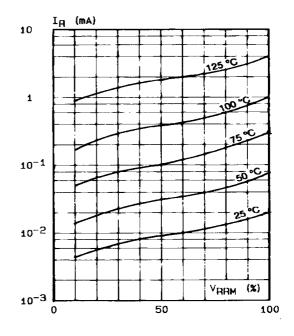




Figure 5. Capacitance C versus reverse applied voltage $V_{\mbox{\scriptsize R}}$ (typical values).

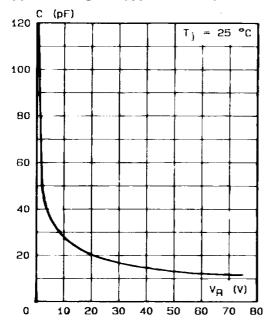


Figure 6. Surge non repetitive forward current for a rectangular pulse with $t \le 10 \text{ ms.}$

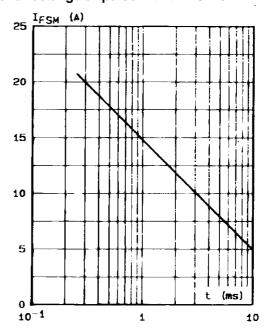


Figure 7. Surge non repetitive forward current versus number of cycles.

