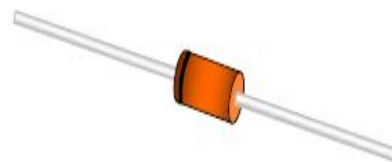


Small Signal Product
500mW High Speed Switching Diode
FEATURES

- Fast switching device($T_{rr}<4.0\text{nS}$)
- Through-hole device type mounting
- Moisture sensitivity level 1
- Solder hot dip Tin(Sn) lead finish
- Pb free version and RoHS compliant
- All external surfaces are corrosion resistant and leads are readily solderable


DO-35
HERMETICALLY SEALED GLASS

MECHANICAL DATA

- Case : DO-35 package (SOD-27)
- High temperature soldering guaranteed: $260^{\circ}\text{C}/10\text{s}$
- Polarity : Indicated by cathode band
- Weight : $109 \pm 4 \text{ mg}$

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P_D	500	mW
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Peak Forward Surge Current Pulse Width = 1 S, Square Wave	I_{FSM}	2.0	A
Non-Repetitive Peak Forward Current	I_{FM}	450	mA
Average Forward Current	I_O	150	mA
Thermal Resistance (Junction to Ambient)	$R_{\theta JA}$	240	$^{\circ}\text{C}/\text{W}$
Junction and Storage Temperature Range	T_J, T_{STG}	-65 to + 150	$^{\circ}\text{C}$

PARAMETER	SYMBOL	MIN	TYP	MAX	CONDITION	UNIT
Reverse Breakdown Voltage	$V_{(BR)}$	100			$I_R=100\mu\text{A}$	V
		75			$I_R=5\mu\text{A}$	
Forward Voltage	V_F	0.62		0.72	1N4448, 1N914B $I_F=5.0\text{mA}$	V
				1.0	1N4148 $I_F=10.0\text{mA}$	
				1.0	1N4448, 1N914B $I_F=100.0\text{mA}$	
Reverse Leakage Current	I_R			25	$V_R=20\text{V}$	nA
				5.0	$V_R=75\text{V}$	μA
Junction Capacitance	C_J			4.0	$V_R=0, f=1.0\text{MHz}$	pF
Reverse Recovery Time (Note 1)	T_{rr}			4.0		ns

Note : 1. Test Conditions : $I_F=10\text{mA}$, $V_R=6\text{V}$, $R_L=100\Omega$, $I_{RR}=1\text{mA}$

Small Signal Product

ORDERING INFORMATION					
PART NO.	MANUFACTURE CODE(Note1)	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
1N4148		A0	G	DO-35 (Glass Seal)	5K / Ammo
1N4148		R0	G	DO-35 (Glass Seal/Paper Reel)	10K / 14" Reel
1N4448		A0	G	DO-35 (Glass Seal)	5K / Ammo
1N4448		R0	G	DO-35 (Glass Seal/Paper Reel)	10K / 14" Reel
1N914B		A0	G	DO-35 (Glass Seal)	5K / Ammo
1N914B		R0	G	DO-35 (Glass Seal/Paper Reel)	10K / 14" Reel

Note1 : Manufacture special control, if empty means no special control requirement.

EXAMPLE					
PREFERRED P/N	PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
1N4148 R0G	1N4148		R0	G	Green compound
1N4148-B0 R0G	1N4148	B0	R0	G	Green compound
1N4148-L0 R0G	1N4148	L0	R0	G	Green compound

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RATINGS AND CHARACTERISTICS CURVES (1N4148/1N4448/1N914B)

(TA=25°C unless otherwise noted)

Fig.1 Typical Forward Characteristics

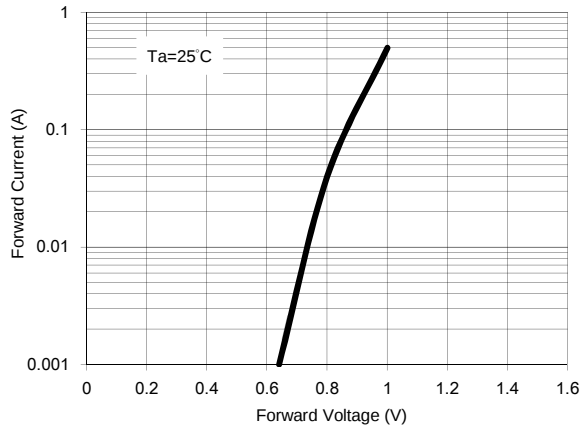


Fig. 2 Reverse Current VS. Reverse Voltage

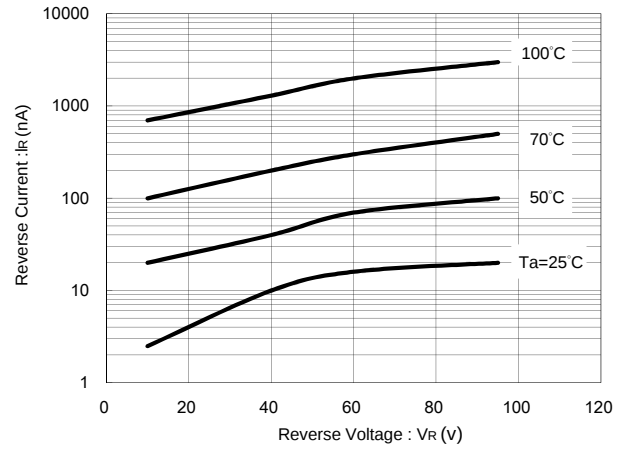


Fig. 3 Admissible Power Dissipation Curve

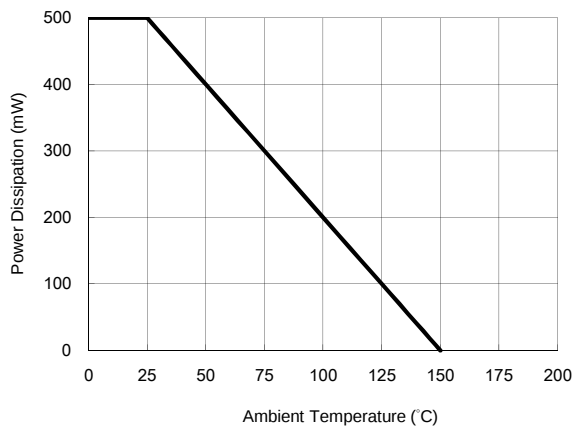
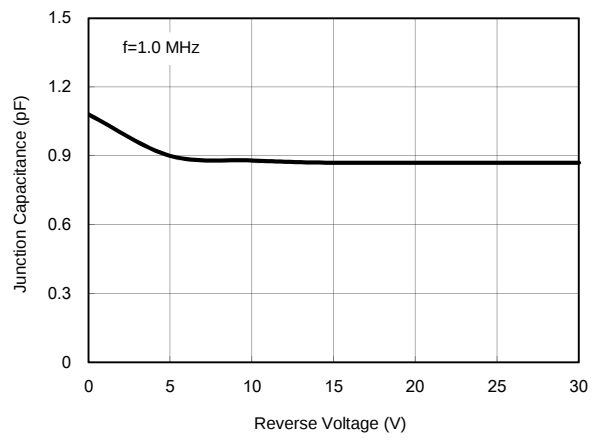


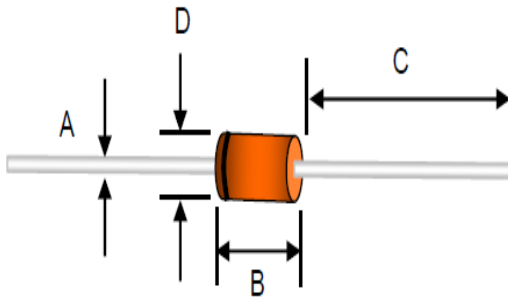
Fig. 4 Typical Junction Capacitance



Small Signal Product

DIMENSIONS

DO - 35



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	0.34	0.60	0.013	0.024
B	2.90	5.08	0.114	0.200
C	25.40	38.10	1.000	1.500
D	1.30	2.28	0.051	0.090