

Features

- Fast Switching Speed: $t_{rr}=4ns$ (Typ)
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- Available in Lead Free Version

Applications

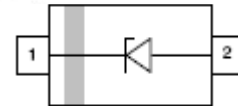
- Surface mount fast switching diode

Ordering information

Type No.	Marking	Package Code
IN4148WS	XX	SOD-323



RoHS
COMPLIANT



SOD-323

Maximum Ratings & Thermal Characteristics

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limits	Unit
Repetitive Peak reverse voltage	V_{RRM}	100	V
Reverse voltage	V_R	75	V
Forward Continuous Current	I_{FM}	300	mA
Average rectified current half wave rectification with resistive load	$I_{F(AV)}$	150	mA
Peak forward surge current @ $t=1.0\mu s$ @ $t=1.0s$	I_{FSM}	2.0 1.0	A
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	R_{thJA}	650	$^\circ\text{C} / \text{W}$
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature	T_{STG}	-65 to +150	$^\circ\text{C}$

Electrical Ratings @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}			1	V	$I_F=10\text{mA}$
	V_{F2}			1.2	V	$I_F=100\text{mA}$
Reverse current	I_R			2	μA	$V_R=75\text{V}$
Junction Capacitance	C_J			4	pF	$V_R=0\text{V}, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}			4	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1I_R, R_L=100\Omega$

Typical Characteristics @Ta=25°C unless Otherwise specified

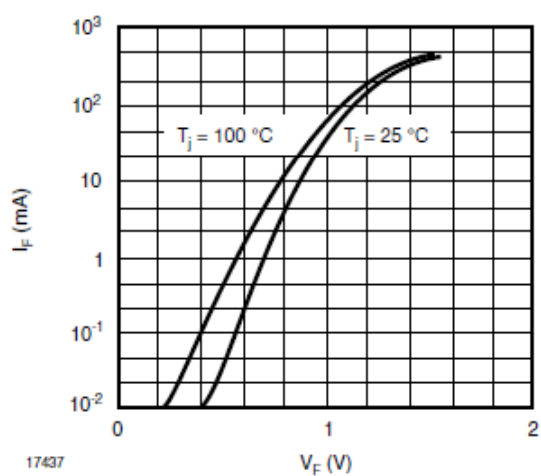


Fig. 1 - Forward Characteristics

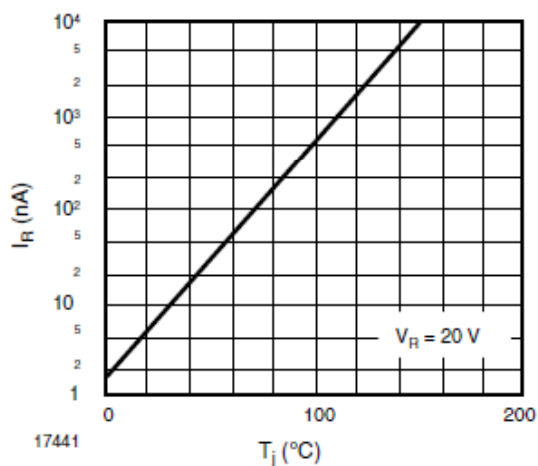
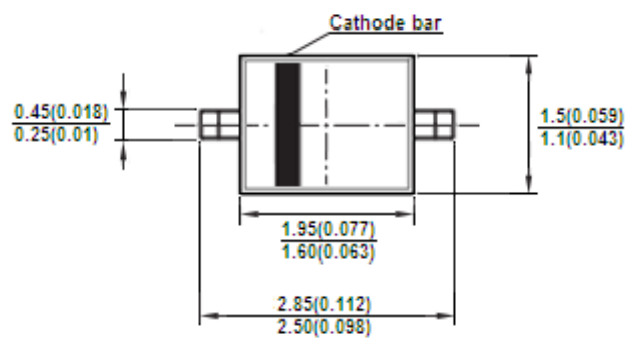
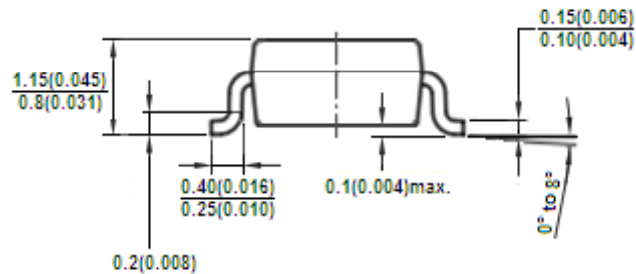
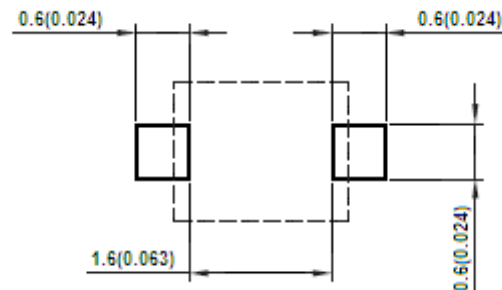


Fig. 5 - Leakage Current vs. Junction Temperature

Package Outline



SOD-323



Foot print recommendation

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