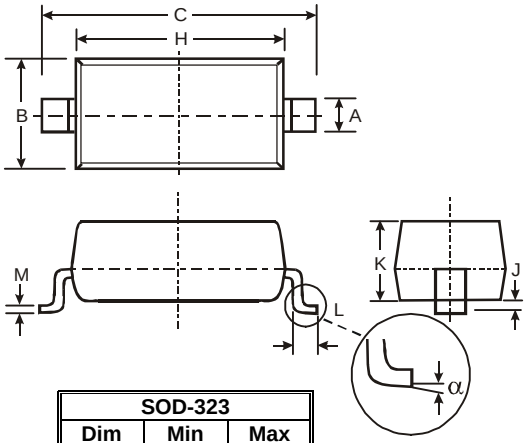
1N4448WS-V

150mA Surface Mount Small Signal Fast Switching Diode

Features

- These diodes are also available in other case styles including the DO35 case with the type designation 1N4448, the MiniMELF case with the type designation LL4448, and the SOT23 case with the type designation IMBD4448-V
- Silicon epitaxial planar diode
- Fast switching diodes
- Lead (Pb)-free component
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



SOD-323		
Dim	**Min**	**Max**
A	0.25	0.35
B	1.20	1.40
C	2.30	2.70
H	1.60	1.80
J	0.00	0.10
K	1.0	1.1
L	0.20	0.40
M	0.10	0.15
α	0°	8°
All Dimensions in mm		

Mechanical Data

- **Case:** SOD323 plastic case
- **Weight:** approx. 4.3 mg
- **Packaging Codes/Options:**

GS18/10 k per 13" reel (8 mm tape), 10 k/box

GS08/3 k per 7" reel (8 mm tape), 15 k/box

Maximum Ratings and Electrical Characteristics

@ T_A = 25°C unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Reverse voltage		V_R	75	V
Repetitive peak reverse voltage		V_{RRM}	100	V
Average rectified current half wave rectification with resistive load	f ≥ 50 Hz	$I_{F(AV)}$	150[1)]	mA
Surge forward current	t < 1 s and T_j = 25 °C	I_{FSM}	350	mA
Power dissipation		P_{tot}	200[1)]	mW

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Forward voltage	I_F = 5 mA	V_F	620		720	mV
	I_F = 100 mA	V_F			1000	mV
Leakage current	V_R = 20 V	I_R			25	nA
	V_R = 75 V	I_R			5	µA
	V_R = 20 V, T_j = 150 °C	I_R			50	µA
Diode capacitance	V_F = V_R = 0 V	C_D			4	pF
Reverse recovery time	I_F = 10 mA, I_R = 1 mA, V_R = 6 V, R_L = 100 Ω	t_{rr}			4	ns
Rectification efficiency	f = 100 MHz, V_{RF} = 2 V	ηv	0.45			

Note:
[1)] Valid provided that electrodes are kept at ambient temperature.

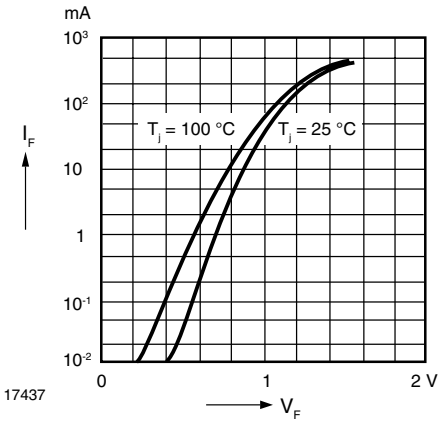


Figure 1. Forward characteristics

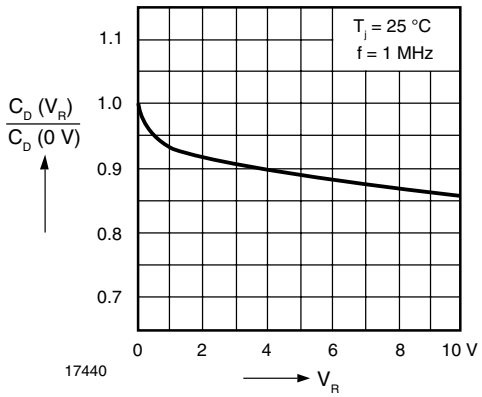


Figure 4. Relative Capacitance vs. Reverse Voltage

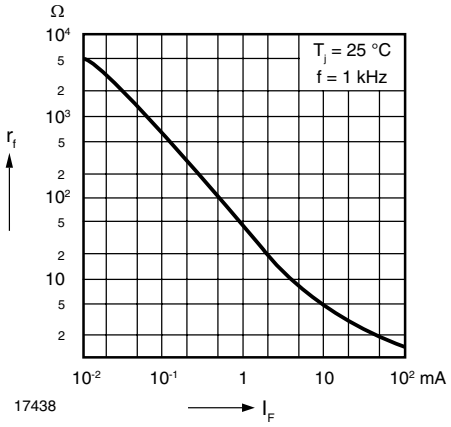


Figure 2. Dynamic Forward Resistance vs. Forward Current

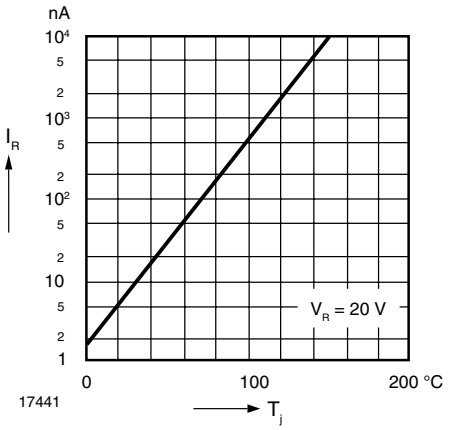


Figure 5. Leakage Current vs. Junction Temperature

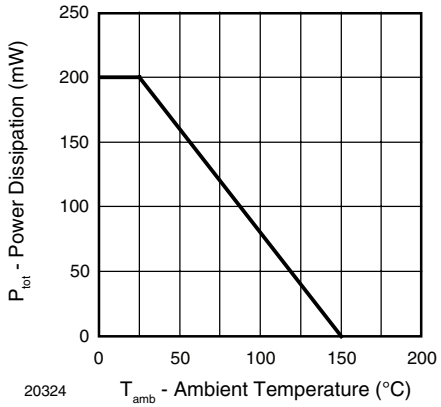


Figure 3. Admissible Power Dissipation vs. Ambient Temperature

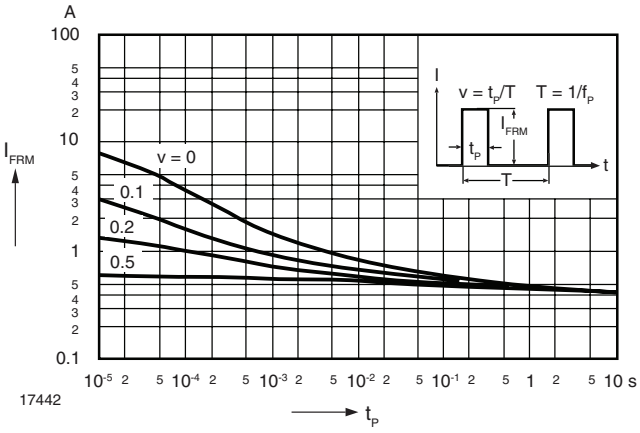


Figure 6. Admissible Repetitive Peak Forward Current vs. Pulse Duration