

Features

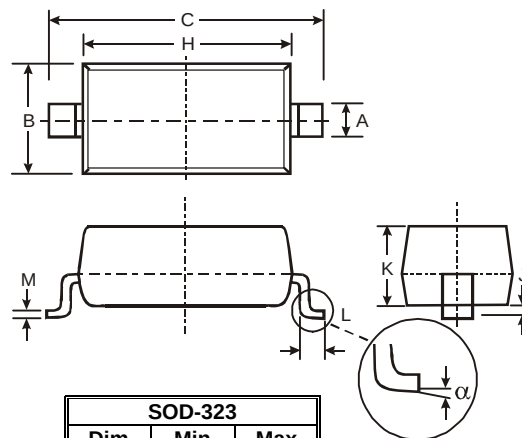
- These diodes are also available in other case styles including the DO35 case with the type designation 1N4448, the MiniMELF case with the type designation LL4448, and the SOT23 case with the type designation IMBD4448-V
- Silicon epitaxial planar diode
- Fast switching diodes
- Lead (Pb)-free component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

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



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		

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ 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	$f \geq 50 \text{ Hz}$	$I_{F(AV)}$		150 ¹⁾		mA	
Surge forward current	$t < 1 \text{ s}$ and $T_j = 25 \text{ }^{\circ}\text{C}$	I_{FSM}		350		mA	
Power dissipation		P_{tot}		200 ¹⁾		mW	
Parameter	Test condition	Symbol	Min	Typ.	Max	Unit	
Forward voltage	$I_F = 5 \text{ mA}$	V_F	620		720	mV	
	$I_F = 100 \text{ mA}$	V_F			1000	mV	
Leakage current	$V_R = 20 \text{ V}$	I_R			25	nA	
	$V_R = 75 \text{ V}$	I_R			5	μA	
	$V_R = 20 \text{ V}$, $T_j = 150 \text{ }^{\circ}\text{C}$	I_R			50	μA	
Diode capacitance	$V_F = V_R = 0 \text{ V}$	C_D			4	pF	
Reverse recovery time	$I_F = 10 \text{ mA}$, $I_R = 1 \text{ mA}$, $V_R = 6 \text{ V}$, $R_L = 100 \text{ }\Omega$	t_{rr}			4	ns	
Rectification efficiency	$f = 100 \text{ MHz}$, $V_{RF} = 2 \text{ V}$	η_v	0.45				

Note:

¹⁾ Valid provided that electrodes are kept at ambient temperature.

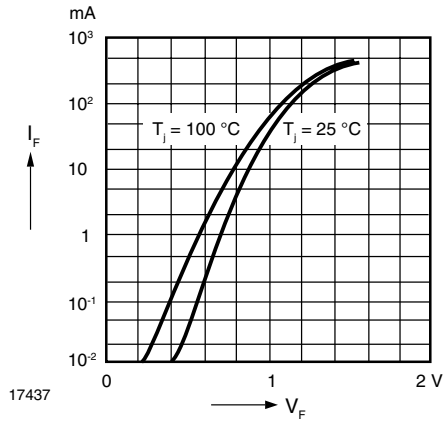


Figure 1. Forward characteristics

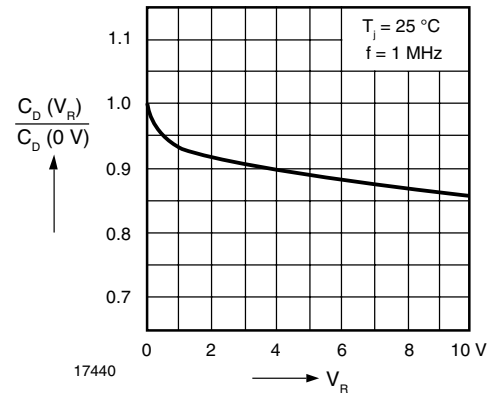


Figure 4. Relative Capacitance vs. Reverse Voltage

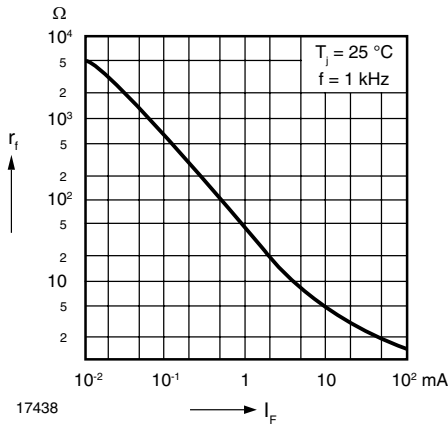


Figure 2. Dynamic Forward Resistance vs. Forward Current

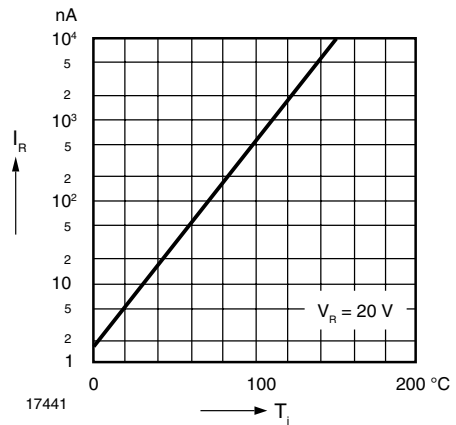


Figure 5. Leakage Current vs. Junction Temperature

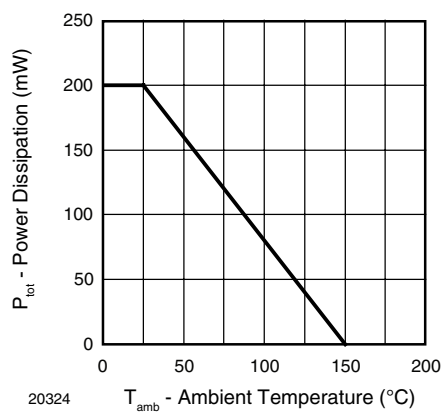


Figure 3. Admissible Power Dissipation vs. Ambient Temperature

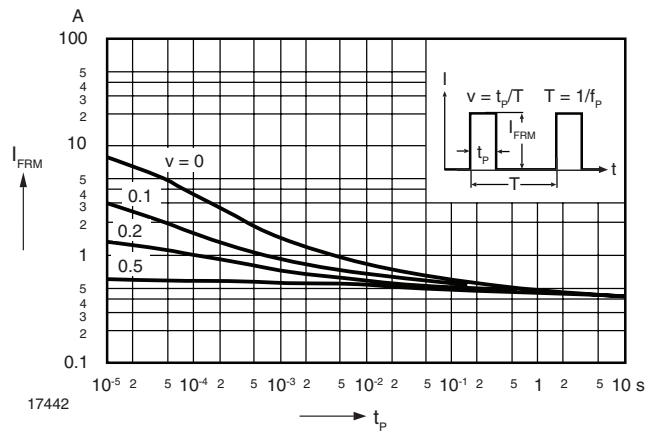


Figure 6. Admissible Repetitive Peak Forward Current vs. Pulse Duration