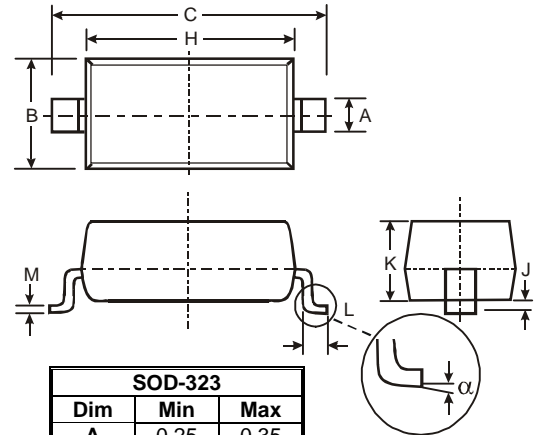


Features

- These diodes are also available in other case styles including the DO35 case with the type designation 1N4148, the MiniMELF case with the type designation LL4148, and the SOT23 case with the type designation IMBD4148-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 = 10 mA	V _F			1000	mV
	I _F = 100 mA	V _F			1200	mV
Leakage current	V _R = 20 V	I _R			25	nA
	V _R = 75 V	I _R			5	μA
	V _R = 100 V	I _R			100	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
Voltage rise when switching ON (tested with 50 mA pulses)	tested with 50 mA pulses, t _p = 0.1 μs, rise time < 30 ns, f _p = (5 to 100) kHz	V _{fr}			2.5	V
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	η _v	0.45			

Note:

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

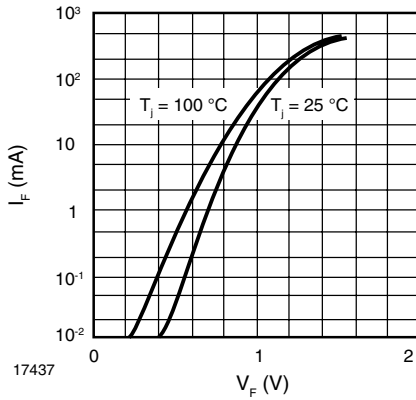


Figure 1. Forward characteristics

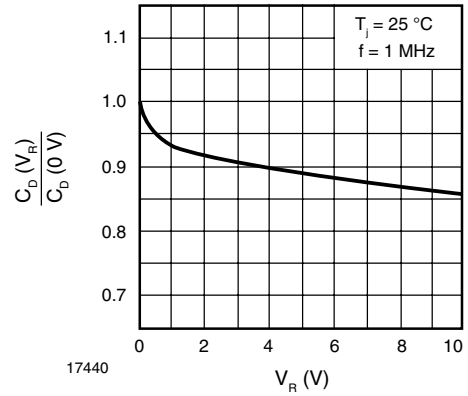


Figure 4. Relative Capacitance vs. Reverse Voltage

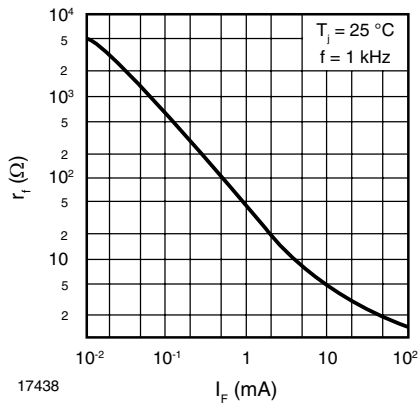


Figure 2. Dynamic Forward Resistance vs. Forward Current

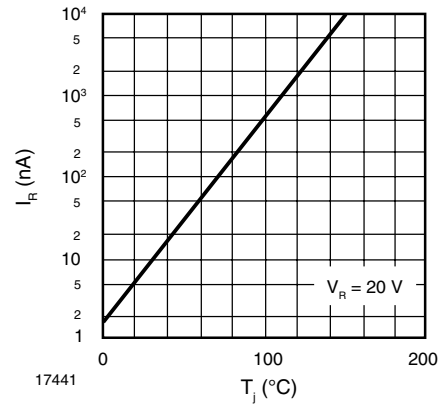


Figure 5. Leakage Current vs. Junction Temperature

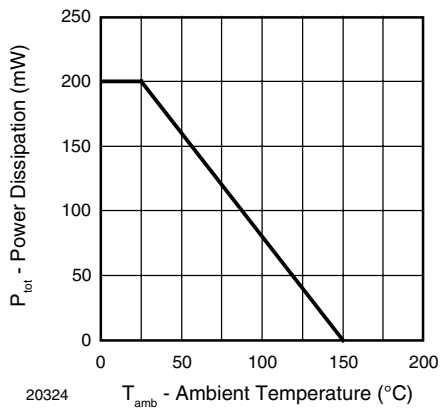


Figure 3. Admissible Power Dissipation vs. Ambient Temperature

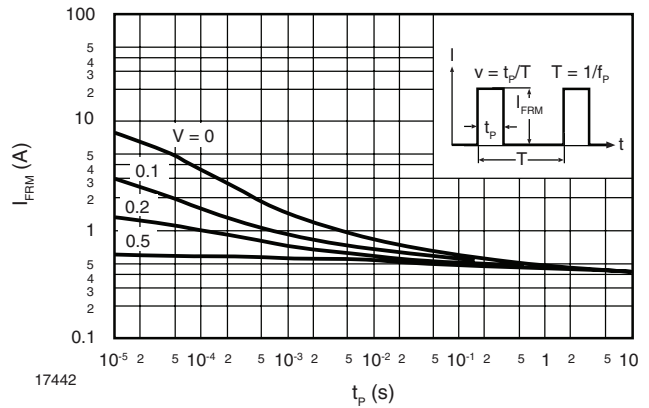


Figure 6. Admissible Repetitive Peak Forward Current vs. Pulse Duration