MANV250GE

Silicon planar type

For surge protect

■ Features

- Large surge reduction power

■ Package

- Code
  SMini2-F3
- Pin Name
  1: Anode
  2: Cathode

■ Marking Symbol: RD

■ Absolute Maximum Ratings $T_a = 25°C$

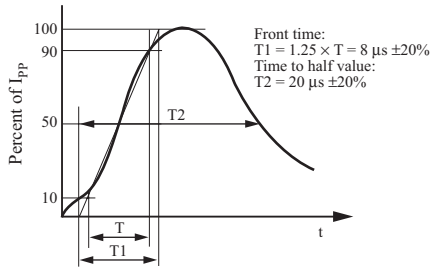
Parameter	Symbol	Rating	Unit
Peak pulse power *1	P_{PP}	450	W
Peak pulse current *1	I_{PP}	9	A
Maximum peak reverse voltage	V_{RM}	18	V
Total power dissipation *2	P_T	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	–55 to +150	°C
Electrostatic discharge *3	ESD	±30	kV

Note) ∗1: Test method: IEC61000-4-5 (tp = 8/20 ms, Unrepeated)
∗2: P_T = 150 mW achieved with a printed circuit board.
∗3: Test method: IEC61000-4-2 (C = 150 pF, R = 330 Ω, Contact discharge: 10 times)

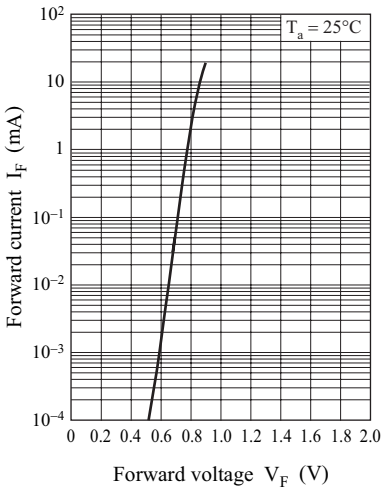
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Breakdown voltage *1	V_{BR}	I_R = 1 mA	20.0	25.0	30.0	V
Reverse current	I_R	V_R = 18 V			10.0	μA
Clamping voltage *2	V_C	I_{PP} = 9.0 A, tp = 8/20 μs			50.0	V
Terminal capacitance	C_t	I_R = 0 V, f = 1 MHz		76		pF

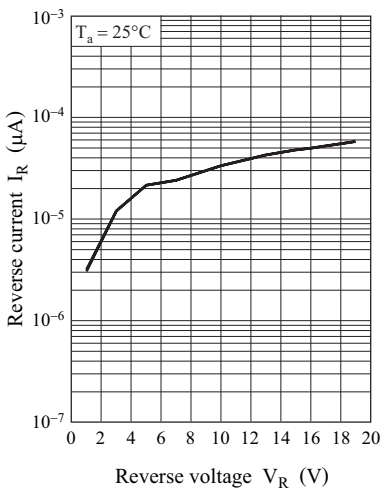
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. ∗1: V_Z guaranted 20 ms after current flow.
∗2: Pulse Waveform



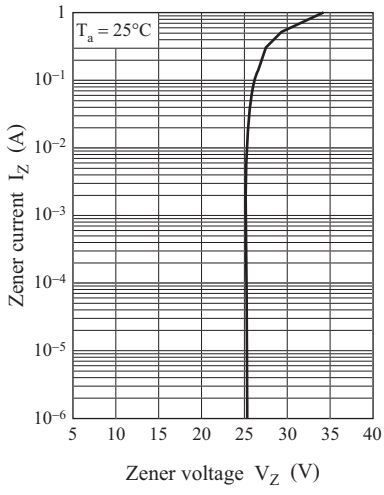
I_F — V_F



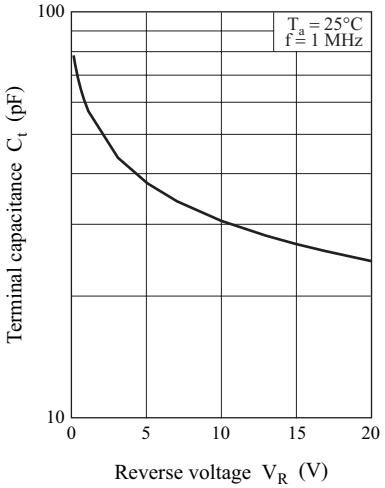
I_R — V_R



I_Z — V_Z

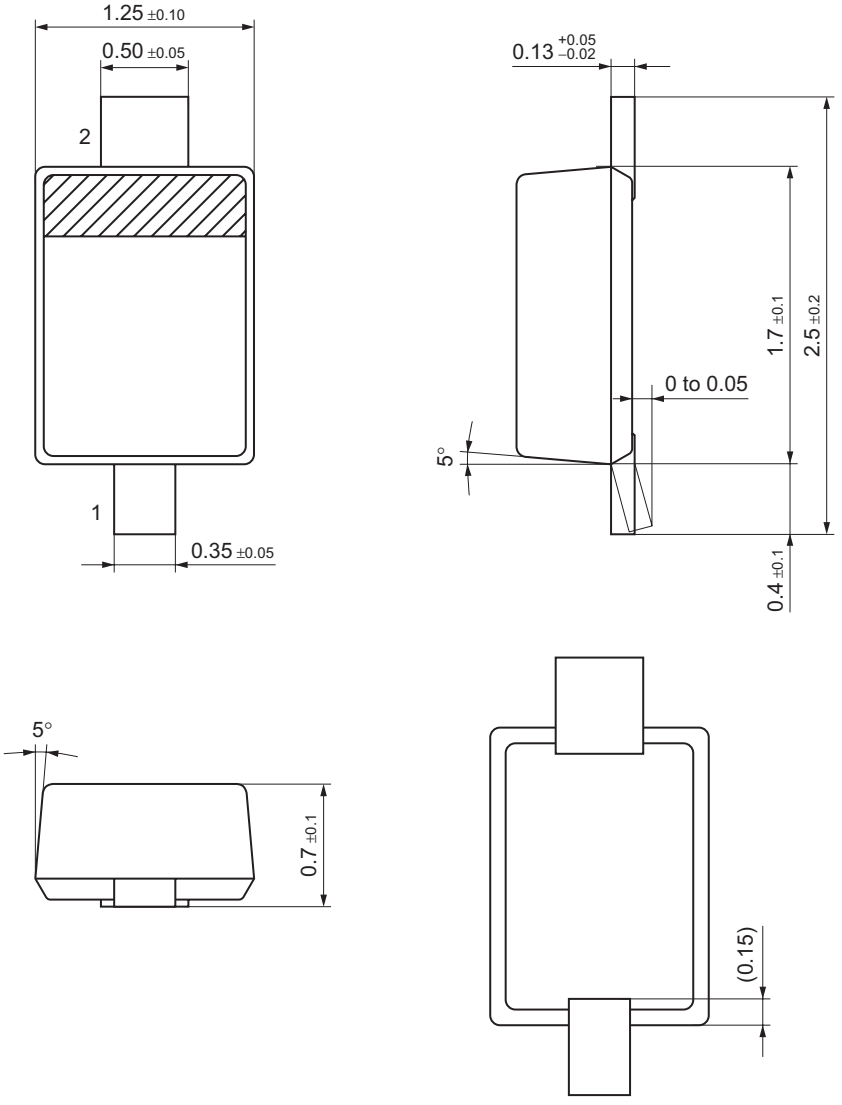


C_t — V_R



SMini2-F3

Unit: mm



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