MALD068XG

Silicon planar type

For ESD protection

■ Overview

MALD068XG is optimal for cell phones and AV application, all types of I/O circuits.

It is possible to protect against forward and reverse surges.

■ Features

- High resistance to surge voltages: 20 kV guaranteed
- Low terminal capacitance C_t for low loss, low distortion, and good retention of signal waveforms.

■ Package

- Code
  SSSMini2-F3
- Pin Name
  1: Cathode
  2: Cathode

■ Marking Symbol: A

■ Absolute Maximum Ratings T_a = 25°C

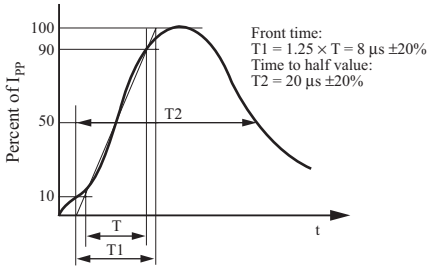
Parameter	Symbol	Rating	Unit
Peak pulse current *1	I_{PP}	3	A
Peak pulse power *1	P_{PP}	33	W
Total power dissipation *2	P_T	150	mW
Junction temperature *3	T_j	150	°C
Storage temperature	T_{stg}	–55 to +150	°C
Electrostatic discharge	ESD	±20	kV

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

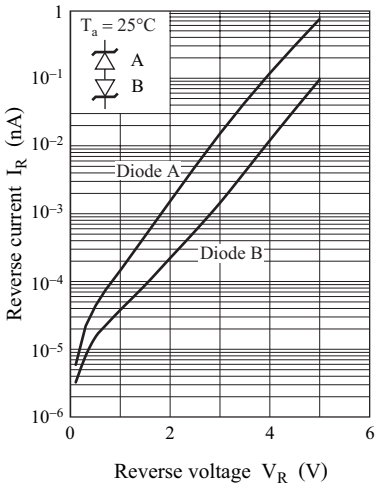
■ Electrical Characteristics T_a = 25°C±3°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Breakdown voltage *1	V_{BR}	I_Z = 5 mA	5.8	7.2	8.8	V
Clamping voltage *2	V_C	I_{PP} = 3.0 A, tp = 8/20 µs			11.0	Ω
Reverse current	I_R	V_R = 3.5 V			500	nA
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		25		pF

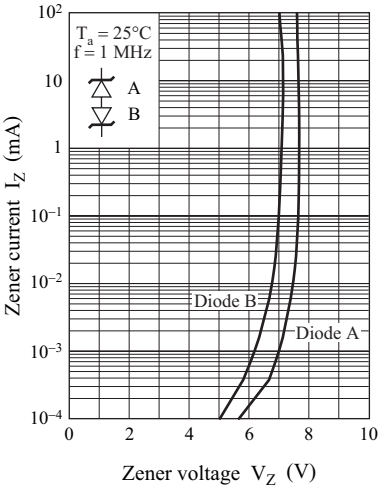
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. ∗1:V_{BR} guaranted 20 ms after current flow.
∗2:Pulse Waveform
3. Absolute frequency of input and output is 5 MHz



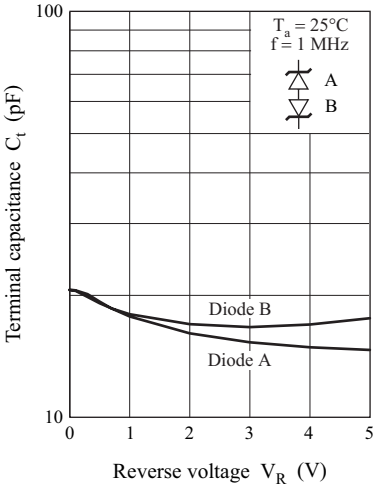
I_R — V_R



I_Z — V_Z

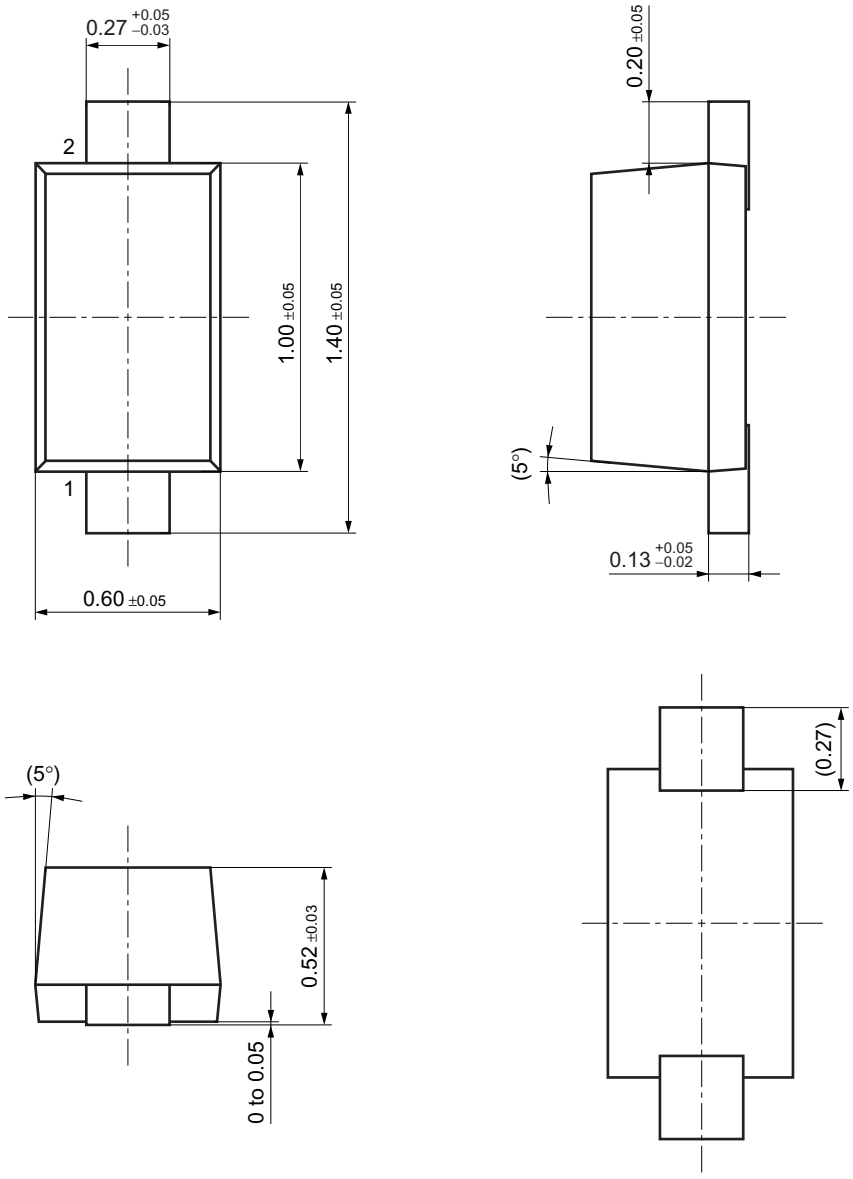


C_t — V_R



SSSMini2-F3

Unit: mm



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