

MALS180X

Silicon planar type

For ESD protection

■ Overview

MALS180X 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: 15 kV guaranteed
- Low terminal capacitance C_t for low loss, low distortion, and good retention of signal waveforms.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	I_{FRM}	200	mA
Total power dissipation *1	P_T	150	mW
Electrostatic discharge *2	ESD	± 15	kV
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note) *1: $P_T = 150$ mW achieved with a printed circuit board.

*2: Test method: IEC61000-4-2 (C = 150 pF, R = 330 Ω , Contact discharge: 10 times)

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Zener voltage *	V_Z	$I_Z = 5$ mA	17.5		20.0	V
Zener operating resistance	R_Z	$I_Z = 5$ mA			60	Ω
Reverse current	I_R	$V_R = 13.0$ V			15	nA
Terminal capacitance	C_t	$V_R = 0$ V, $f = 1$ MHz		4		pF

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. The temperature must be controlled 25°C for V_Z measurement.

V_Z value measured at other temperature must be adjusted to $V_Z(25^\circ\text{C})$

3. *: V_Z guaranteed 20 ms after current flow.

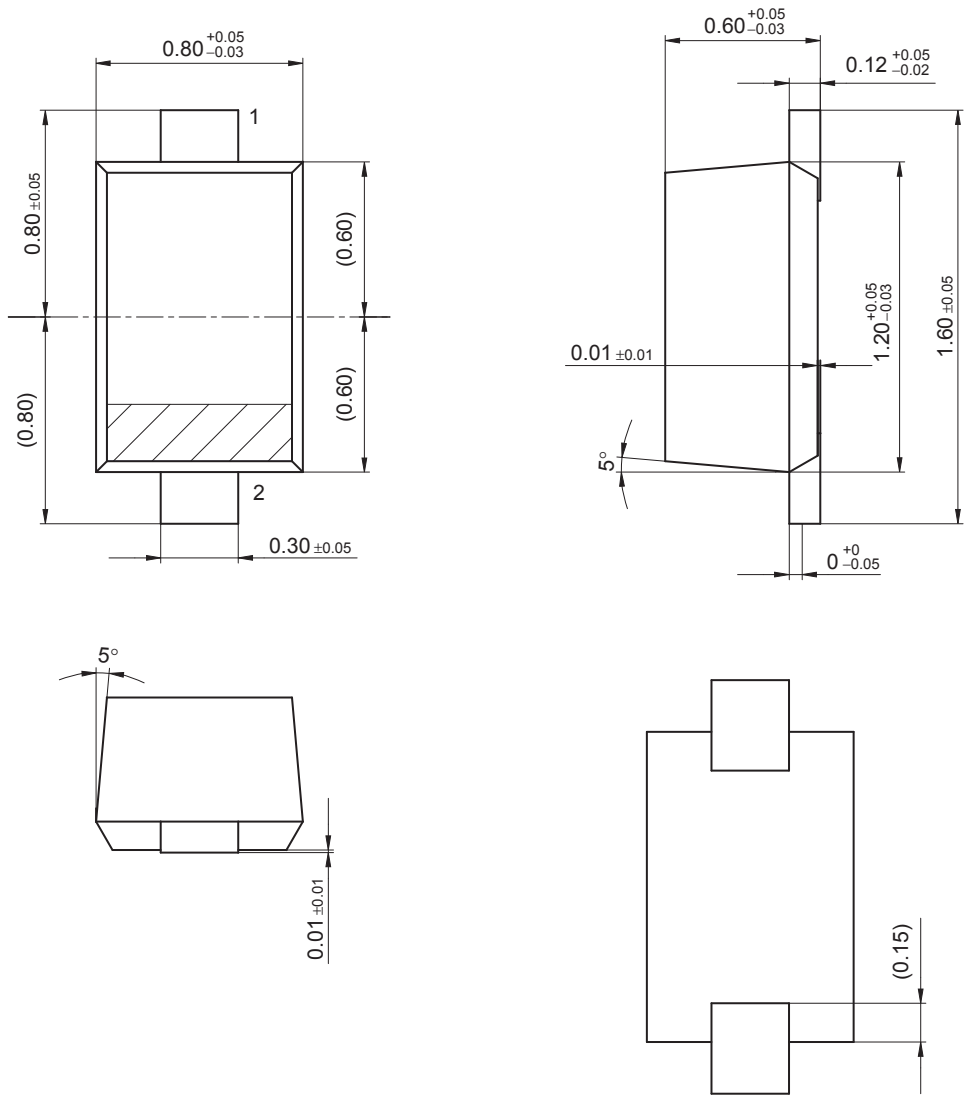
■ Package

- Code
SSMini2-F1
- Pin Name
1: Cathode
2: Cathode

■ Marking Symbol: SX

SSMini2-F1

Unit: mm



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