



Micro Commercial Components



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LSM05B

ESD Protection Device

Features

- Halogen free available upon request by adding suffix "-HF"
- Low reverse clamping voltage
- Low leakage current
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: BL5A

Maximum Ratings

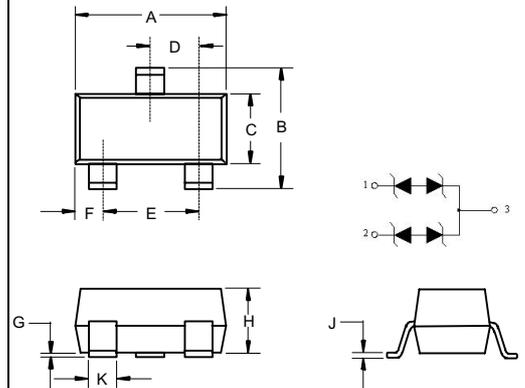
- Operating Junction & Storage Temperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact	$V_{ESD}^{(1)}$	± 25 ± 25	KV
ESD Voltage per human body mode ESD Voltage per Machine Model	$V_{ESD}^{(1)}$	± 16 ± 0.4	KV
Peak Pulse Power	$P_{PP}^{(2)}$	50	w
Peak Pulse Current	$I_{PP}^{(2)}$	5	A

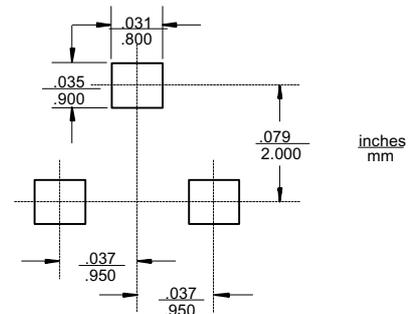
(1). Device stressed with ten non-repetitive ESD pulses.

(2). Non-repetitive current pulse 8/20µs exponential decay waveform according to IEC61000-4-5.

SOT-23

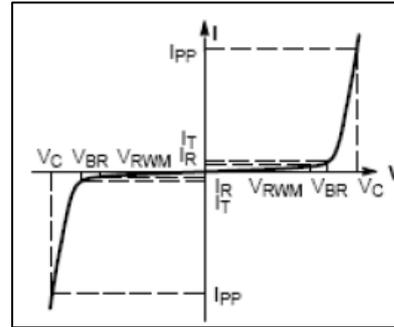


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	



ELECTRICAL PARAMETER

Symbol	Parameter
V_C	Clamping Voltage @ I_{PP}
I_{PP}	Peak Pulse Current
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_R	Reverse Leakage Current @ V_{RWM}
V_{RWM}	Reverse Standoff Voltage



V-I characteristics for a Bi-directional TVS

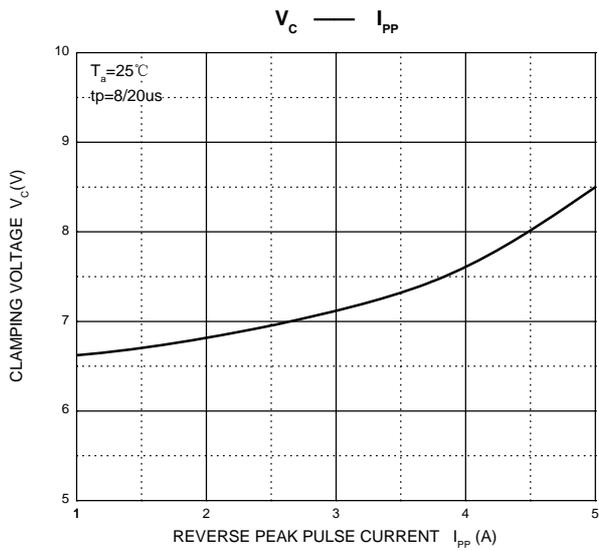
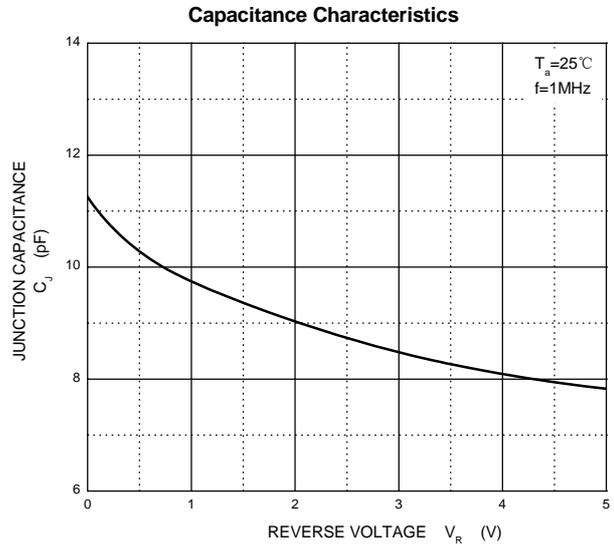
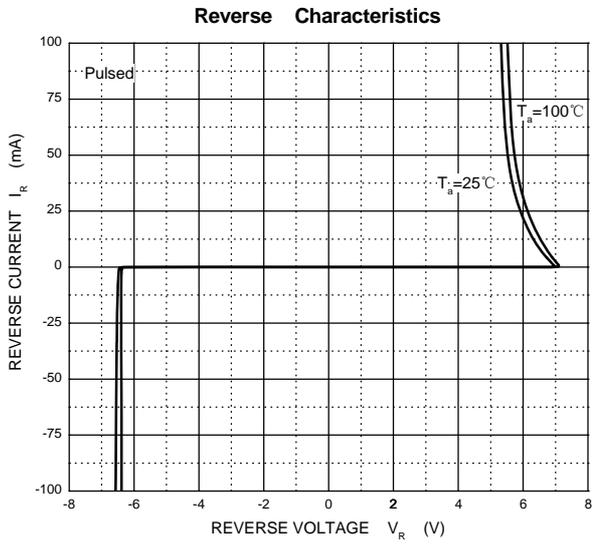
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse stand off voltage	$V_{RWM}^{(1)}$				5	V
Reverse leakage current	I_R	$V_{RWM}=5\text{V}$			0.1	μA
Breakdown voltage	$V_{(BR)}$	$I_T=1\text{mA}$	5.8		8	V
Clamping voltage	$V_C^{(2)}$	$I_{PP}=5\text{A}$			10	V
Junction capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$		12	15	pF

(1). Other voltages available upon request.

(2). Non-repetitive current pulse 8/20 μs exponential decay waveform according to IEC61000-4-5

TYPICAL CHARACTERISTICS





Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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