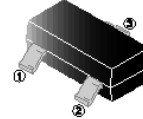


RoHS Compliant Product
A suffix of "-C" specifies halogen and lead-free

FEATURES

- Capacitance: 12pF (Typ.)
- Reverse Working Voltage: 24V
- IEC 61000-4-2 (ESD): ±30kV(Air)
- IEC 61000-4-2 (ESD): ±30kV(Contact)
- IEC 61000-4-5 (Surge): 3A (8/20µs)

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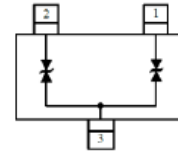


MARKING

aD

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-323	3K	7 inch



ORDER INFORMATION

Part Number	Type
SIMD24C-C	Lead (Pb)-free and Halogen-free

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
IEC 61000-4-2 ESD Voltage	Air	±30	KV
	Contact	±30	
Peak Pulse Power @tp=8/20µs	P _{PP}	126	W
Peak Pulse Current @tp=8/20µs	I _{PP}	3	A
Operating Temperature Range	T _J	-40~125	°C
Storage Temperature Range	T _{STG}	-55~150	

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Working Voltage	V _{RWM}	-	-	24	V	
Breakdown Voltage	V _{BR}	26.7	-	35	V	I _T =1mA
Reverse Leakage Current	I _R	-	0.01	0.1	µA	V _{RWM} =24V
Surge Clamping Voltage @tp=8/20µs	V _C	-	-	42	V	I _{PP} =3A
Junction Capacitance	C _J	-	12	17	pF	V _R =0, f=1MHz

RATINGS AND CHARACTERISTICS CURVES

FIG. 1-Pulse Waveform

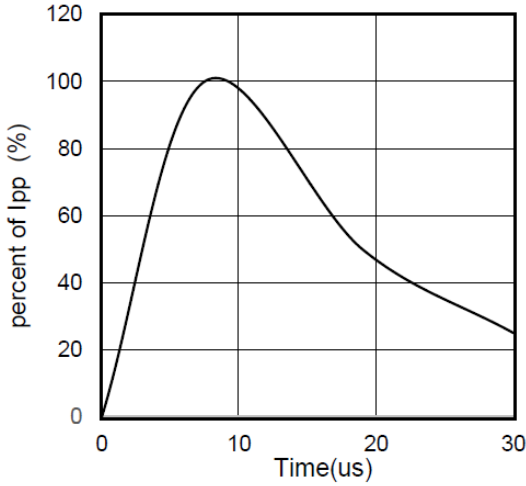


FIG. 2-Capacitance

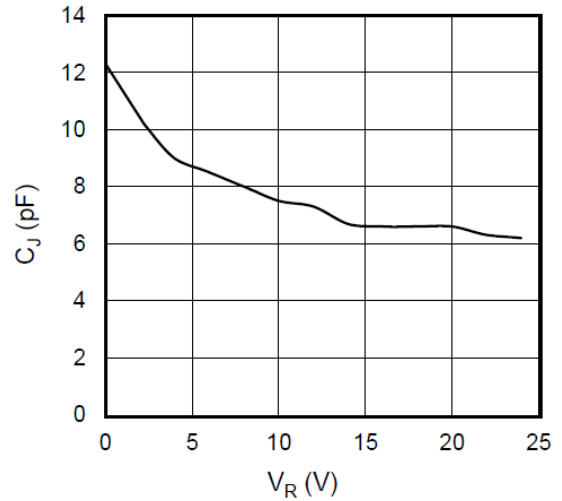


FIG. 3-I/V curve

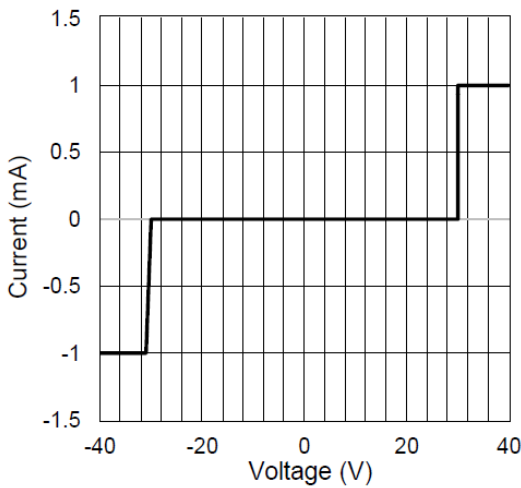


FIG. 4-ESD Clamping of I/O to GND

(-8kV Contact per IEC 61000-4-2)

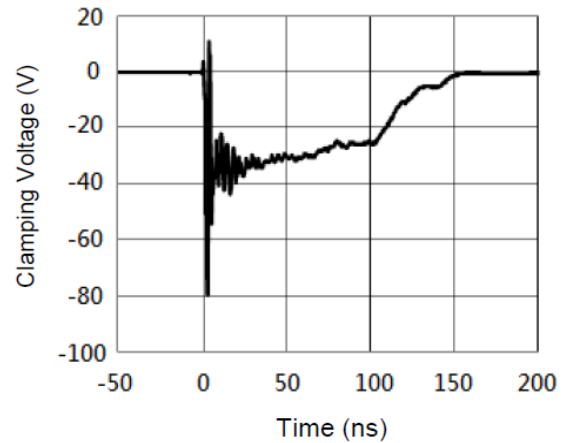
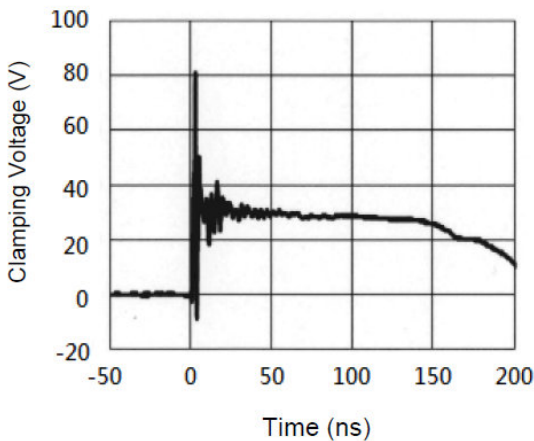


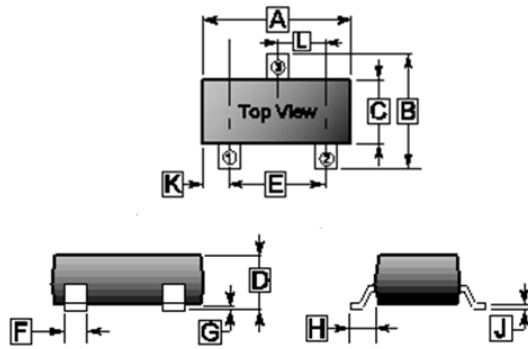
FIG. 5-ESD Clamping of I/O to GND

(+8kV Contact per IEC 61000-4-2)



PACKAGE OUTLINE DIMENSIONS

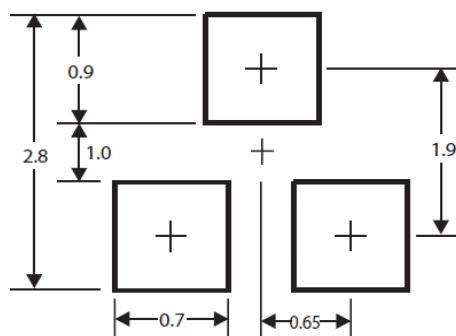
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REF.	Millimeter	
	Min.	Max.
A	1.80	2.20
B	1.80	2.55
C	1.10	1.40
D	0.80	1.15
E	1.20	2.00
F	0.15	0.50
G	0.10 REF.	
H	0.525 REF.	
J	0.05	0.05
K	0.35 REF.	
L	0.65 TYP.	

MOUNTING PAD LAYOUT

SOT-323



*Dimensions in millimeters