

Features

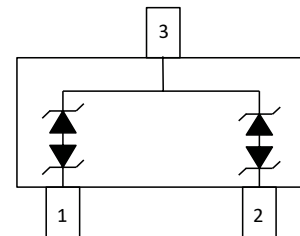
- 150W peak pulse power (8/20μs)
- Protects one two uni-directional line(s)
- Ultra low leakage: nA level
- Operating voltage: 24V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: ±25kV
 - Contact discharge: ±20kV
 - IEC61000-4-5 (Lightning) 4A (8/20μs)
- RoHS Compliant



SOT-23

Mechanical Characteristics

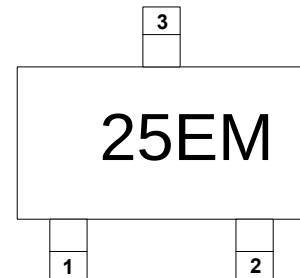
- Package: SOT-23
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- Terminal Connections: See Diagram Below
- Marking Information: See Below



Circuit diagram

Applications

- Cellular Handsets and Accessories
- Notebooks and Handhelds
- Portable Instrumentation
- Set Top Box
- Industrial Controls
- Server and Desktop PC



25EM= Device code

Marking (Top View)

Ordering Information

Part Number	Packaging	Reel Size
ESDONCAN1LT1G	3000/Tape & Reel	7 inch

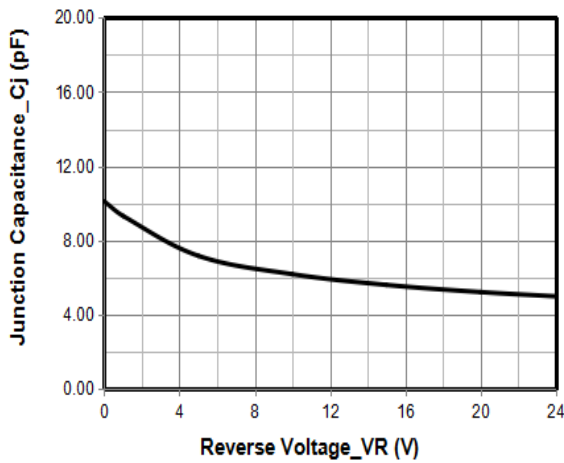
Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{pk}	150	W
Peak Pulse Current (8/20μs)	I _{PP}	4	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	±25 ±20	kV
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

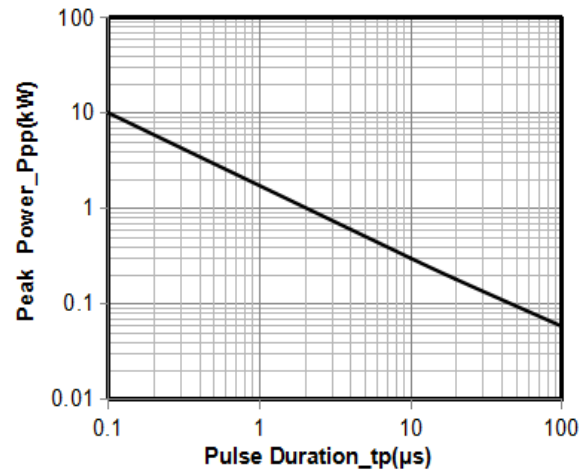
Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			24	V	
Breakdown Voltage	V _{BR}	26.7			V	I _T = 1mA
Reverse Leakage Current	I _R			0.2	μA	V _{RWM} = 24V
Clamping Voltage	V _C		33	35	V	I _{PP} = 1A (8 x 20μs pulse)
Clamping Voltage	V _C		42	50	V	I _{PP} = 3A (8 x 20μs pulse)
Junction Capacitance	C _J		10		pF	V _R = 0V, f = 1MHz, Pin 1 to Pin 3 or Pin 2 to Pin 3
Junction Capacitance	C _J		5		pF	V _R = 0V, f = 1MHz, Pin 1 to Pin 2

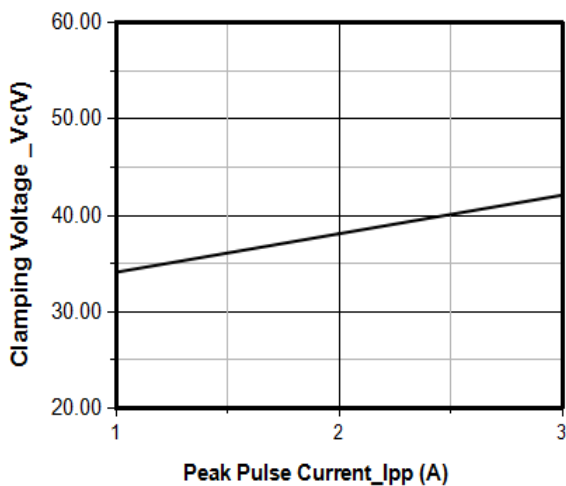
Typical Performance Characteristics (TA=25°C unless otherwise Specified)



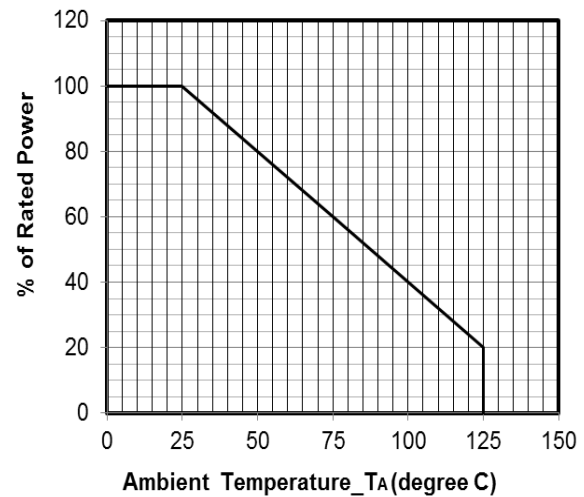
Junction Capacitance vs. Reverse Voltage



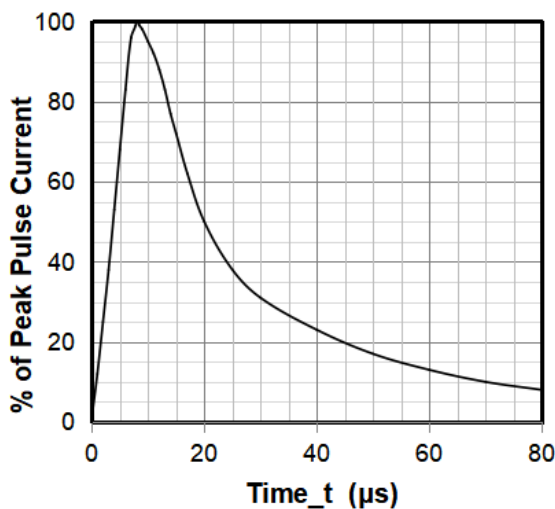
Peak Pulse Power vs. Pulse Time



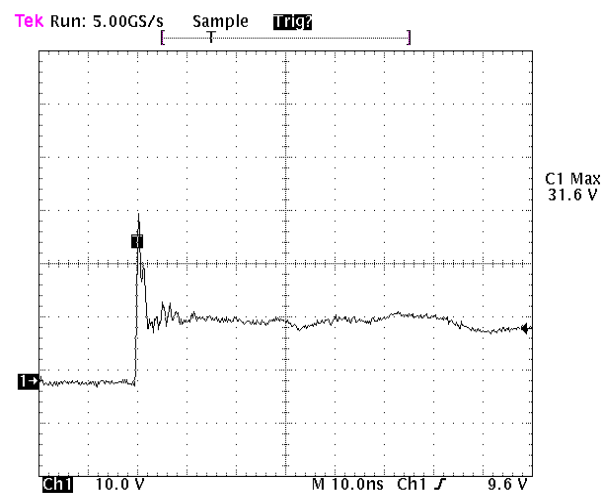
Clamping Voltage vs. Peak Pulse Current



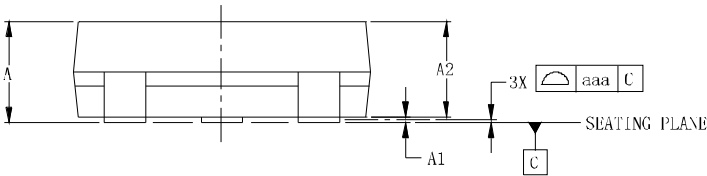
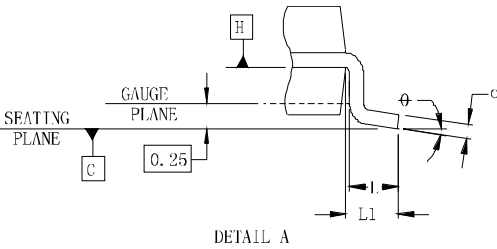
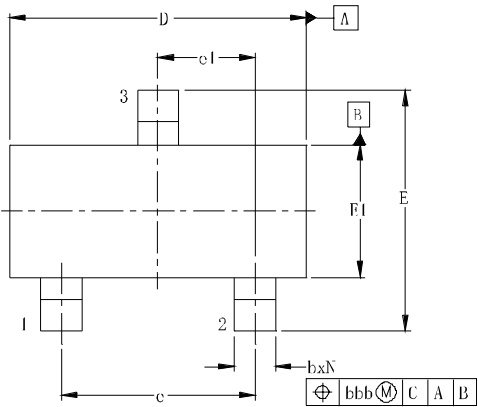
Power Derating Curve



8 X 20μs Pulse Waveform



Note: Data is taken with a 10x attenuator
ESD Clamping Voltage
8 kV Contact per IEC61000-4-2



Suggested Land Pattern

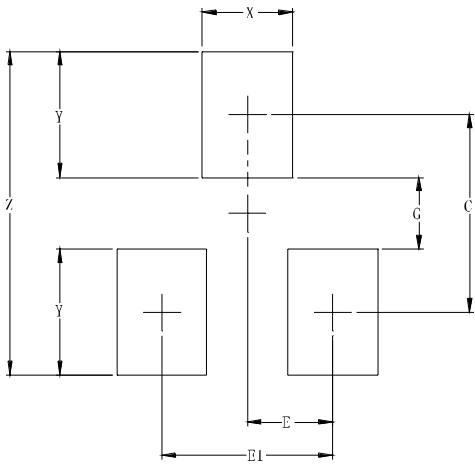


Table with 7 columns: SYM, INCHES (MIN, NOM, MAX), MILLIMETERS (MIN, NOM, MAX). Rows include dimensions A, A1, A2, b, c, D, E, E1, e, e1, L, L1, N, theta, aaa, and bbb.

Table with 3 columns: SYM, INCHES, MILLIMETERS. Rows include dimensions C, E, E1, G, X, Y, and Z.