

Low Capacitance Quad Array for ESD Protection

General Description

Low capacitance 4-fold ESD protection array in the very small SOT353 plastic package designed to protect up to five transmission or data lines from the damage caused by Electrostatic Discharge (ESD).

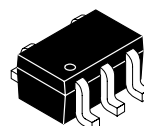
Applications

- Cellular handsets and accessories
- Portable electronics
- Computers and peripherals
- Communications systems
- Audio and video equipment.

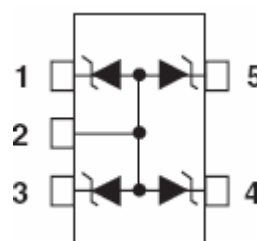
Features

- Uni-directional ESD protection of up to five lines
- Bi-directional ESD protection of up to four lines
- Low diode capacitance
- Low clamping voltage
- low leakage current
- IEC 61000-4-2; level 4 (ESD)
- IEC61000-4-5 (surge)

LESDA12AW5T1G



SC-88A/SOT-353



ORDERING INFORMATION

Device	Package	Shipping
LESDA12AW5T1G	SC-88A	3000/Tape & Reel

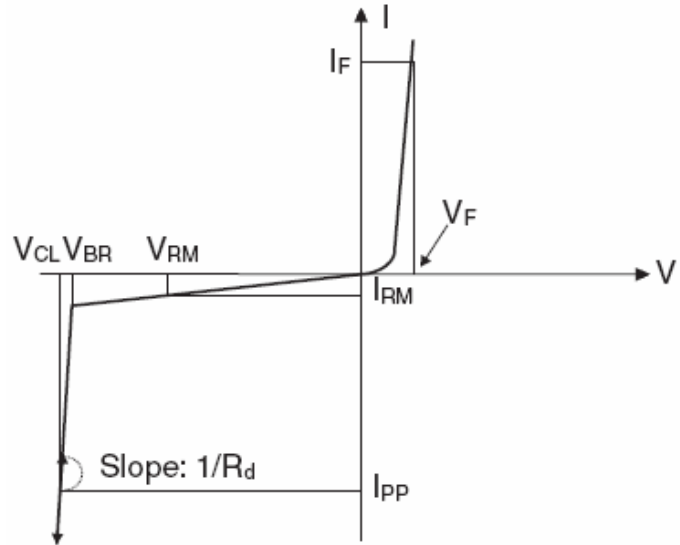
Absolute Ratings (T_{amb}=25°C)

Symbol	Parameter	Value	Units
P _{PP}	Peak Pulse Power (t _p = 8/20μs)	25	W
T _L	Maximum lead temperature for soldering during 10s	260	°C
T _{stg}	Storage Temperature Range	-60 to +150	°C
T _{op}	Operating Temperature Range	-60 to +150	°C
T _j	Maximum junction temperature	150	°C
V _{PP}	Electrostatic discharge		
	IEC61000-4-2 (contact discharge)	8	kV
	IEC61000-4-2 (air discharge)	15	kV

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Electrical Parameter

Symbol	Parameter
V_{RM}	Stand-off voltage
V_{BR}	Breakdown voltage
V_{CL}	Clamping voltage
I_R	Leakage current
I_{PP}	Peak pulse current
C	Capacitance



Electrical Characteristics

Part Numbers	V_{BR}			V_{RM}	I_R	V_{FP}	C
	Min.	Typ	Max.				
	v	v	v	v	μA	$I_F = 1A$ 8/20 μs v	f=1MHz; $V_R = 0 V$; pF
LESDA12AW5T1G	13.3	14.6	15.8	12	1	1.5	15

GRAPHICAL DATA

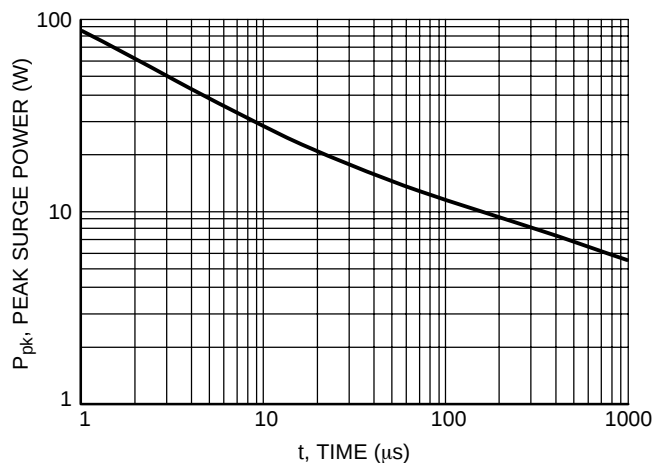


Figure 1. Pulse Width

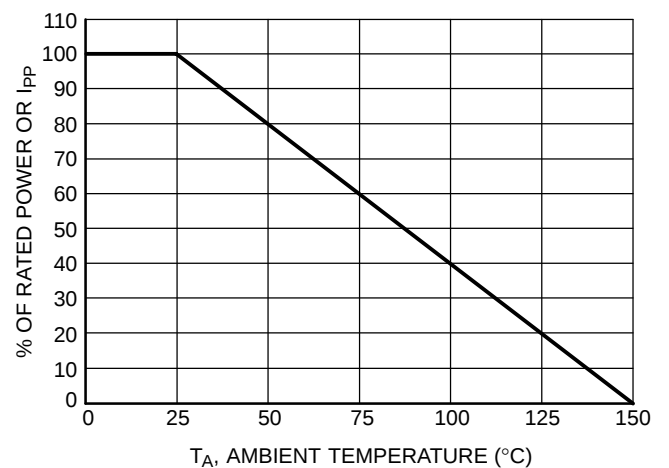


Figure 2. Power Derating Curve

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GRAPHICAL DATA

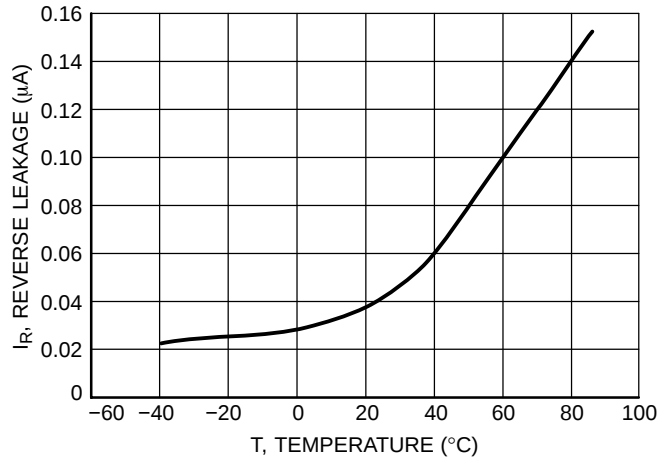


Figure 3. Reverse Leakage versus Temperature

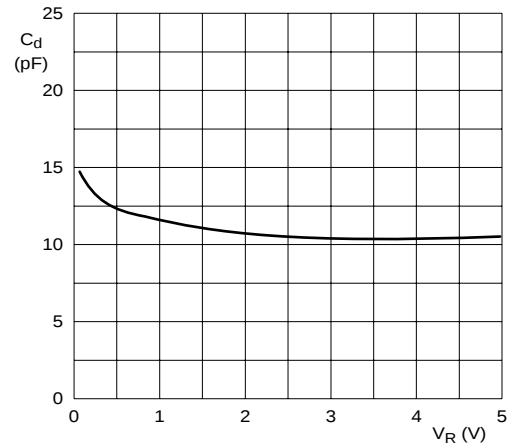


Figure 4. Capacitance

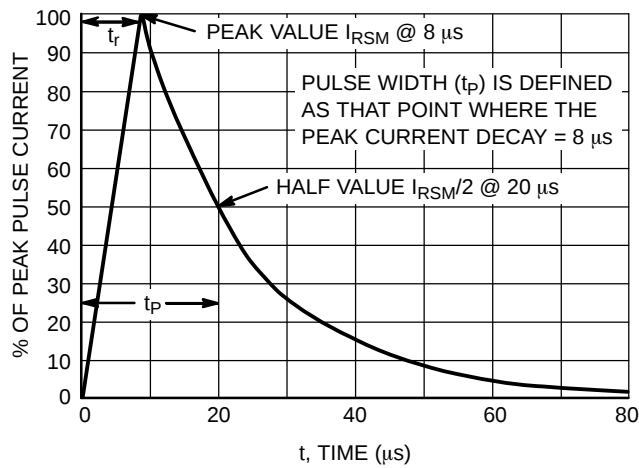


Figure 5. 8 × 20 μs Pulse Waveform

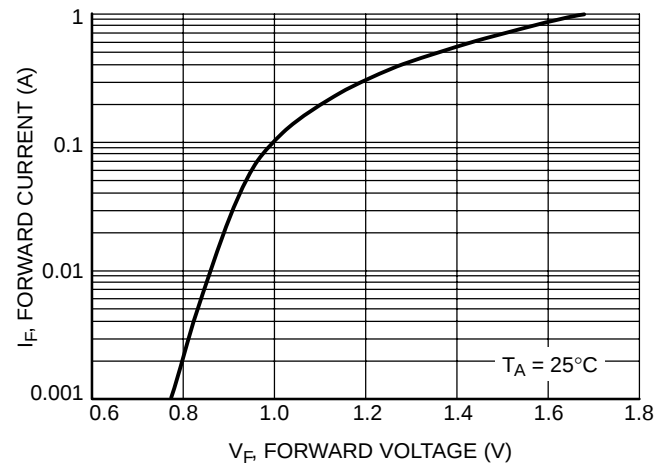
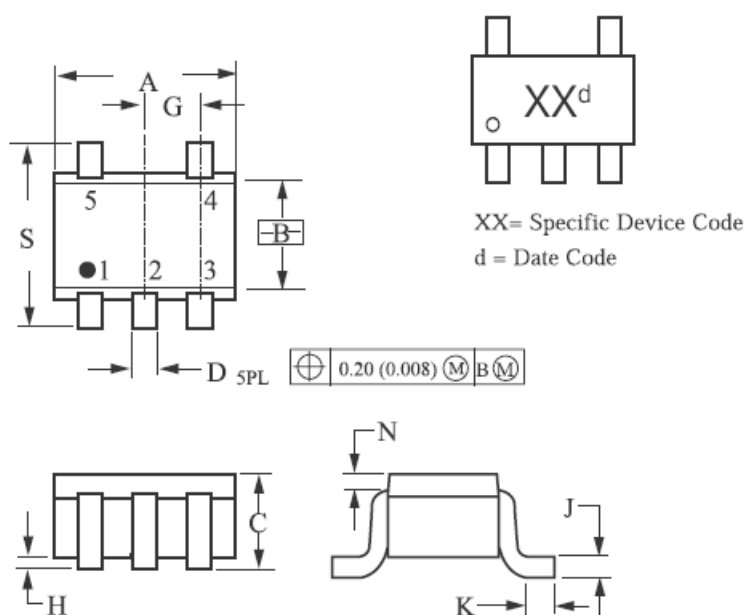


Figure 6. Forward Voltage

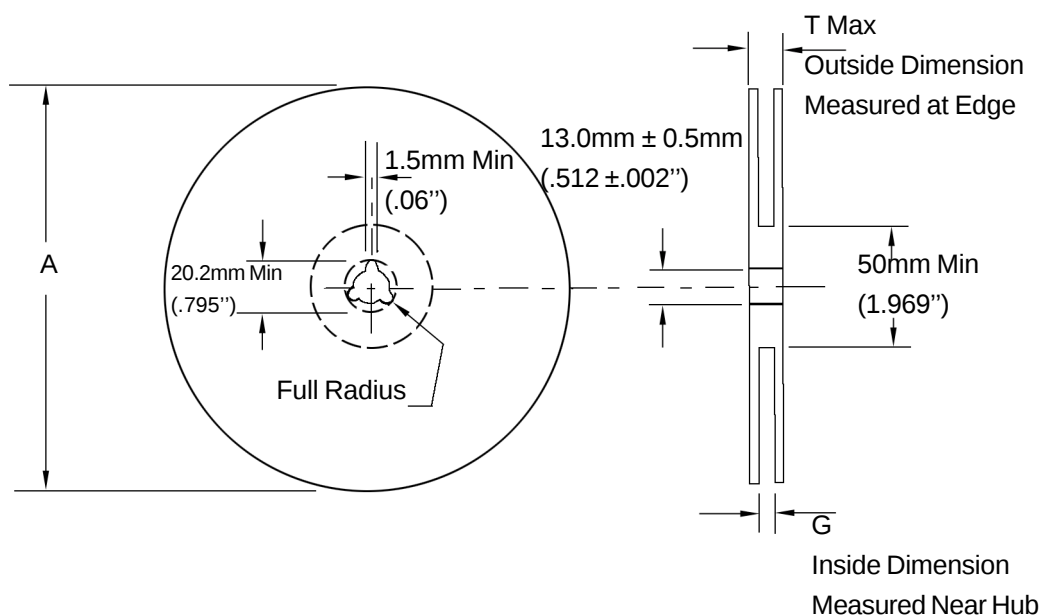
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PACKAGE DIMENSIONS SC-88A/SOT-353



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.80	2.20	0.071	0.087
B	1.15	1.35	0.045	0.053
C	0.80	1.10	0.031	0.043
D	0.10	0.30	0.004	0.012
G	0.65 BSC		0.026 BSC	
H	—	0.10	—	0.004
J	0.10	0.25	0.004	0.010
K	0.10	0.30	0.004	0.012
N	0.20 REF		0.008 REF	
S	2.00	2.20	0.079	0.087

EMBOSSED TAPE AND REEL DATA FOR DISCRETES



Size	A Max	G	T Max
8 mm	178.0mm (7.0")	8.4mm+1.5mm, -0.0 (.33"+.039", -0.00)	10.9mm (.43")

Reel Dimensions

Metric Dimensions Govern — English are in parentheses for reference only

Storage Conditions

Temperature: 5 to 40 Deg.C (20 to 30 Deg. C is preferred)

Humidity: 30 to 80 RH (40 to 60 is preferred)

Recommended Period: One year after manufacturing

(This recommended period is for the soldering condition only. The characteristics and reliabilities of the products are not restricted to this limitation)

Shipment Specification

