

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).

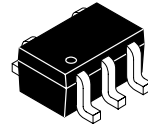
Applications

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

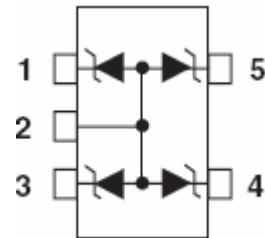
Features

- 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

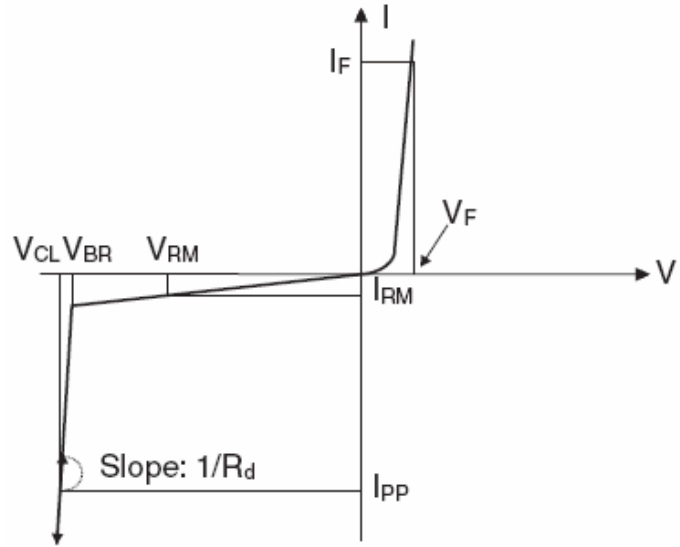
Absolute Ratings (T_{amb}=25°C)

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. v	Typ v	Max. 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

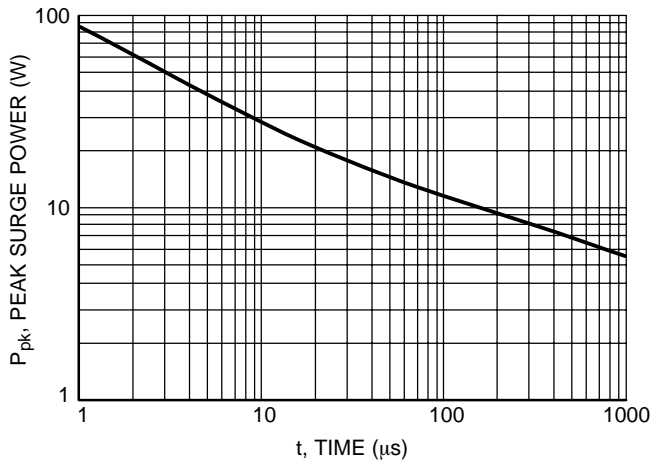


Figure 1. Pulse Width

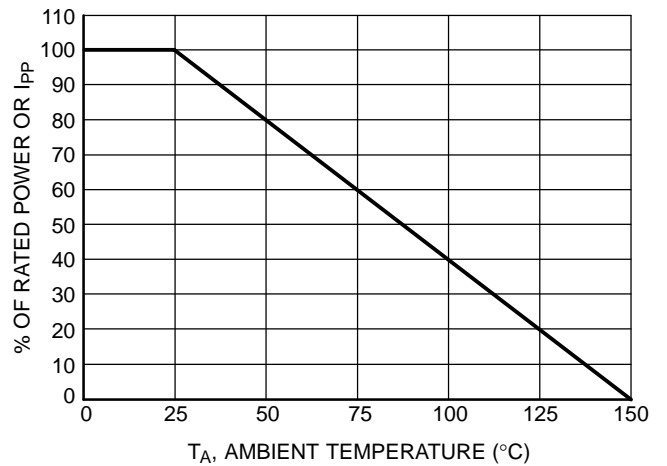


Figure 2. Power Derating Curve

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GRAPHICAL DATA

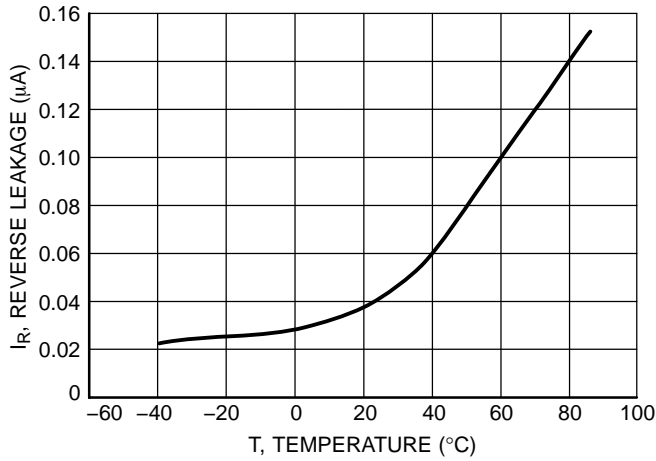


Figure 3. Reverse Leakage versus Temperature

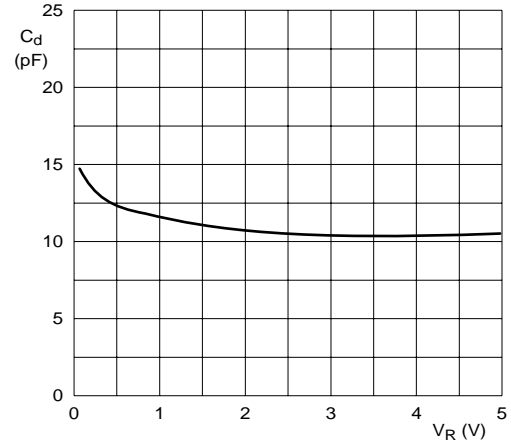


Figure 4. Capacitance

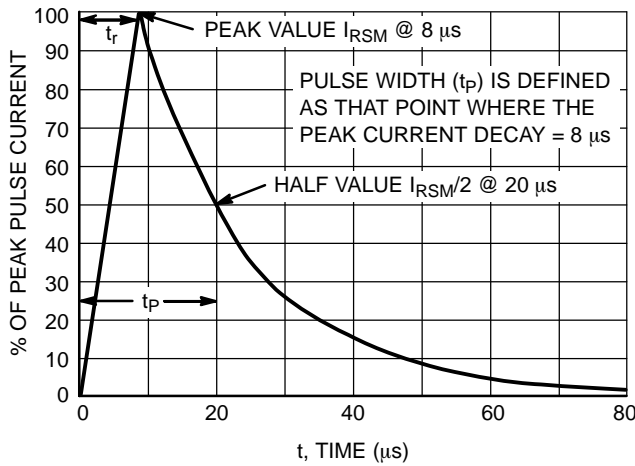


Figure 5. 8 × 20 μs Pulse Waveform

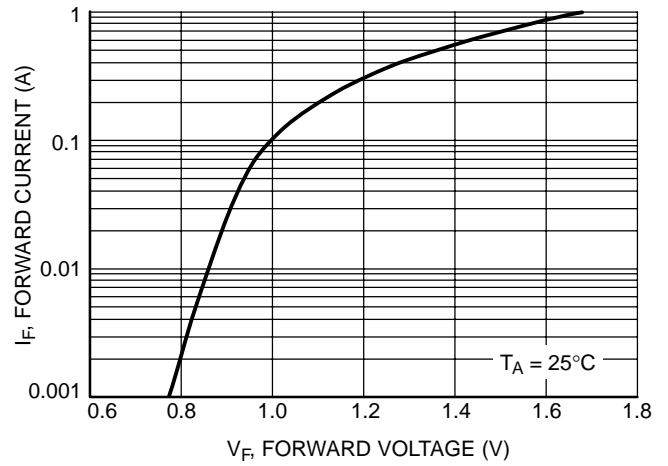
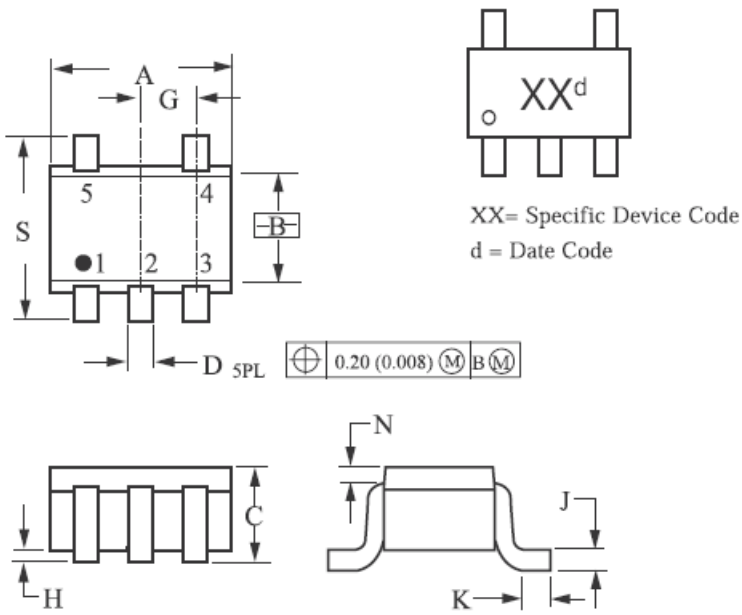


Figure 6. Forward Voltage

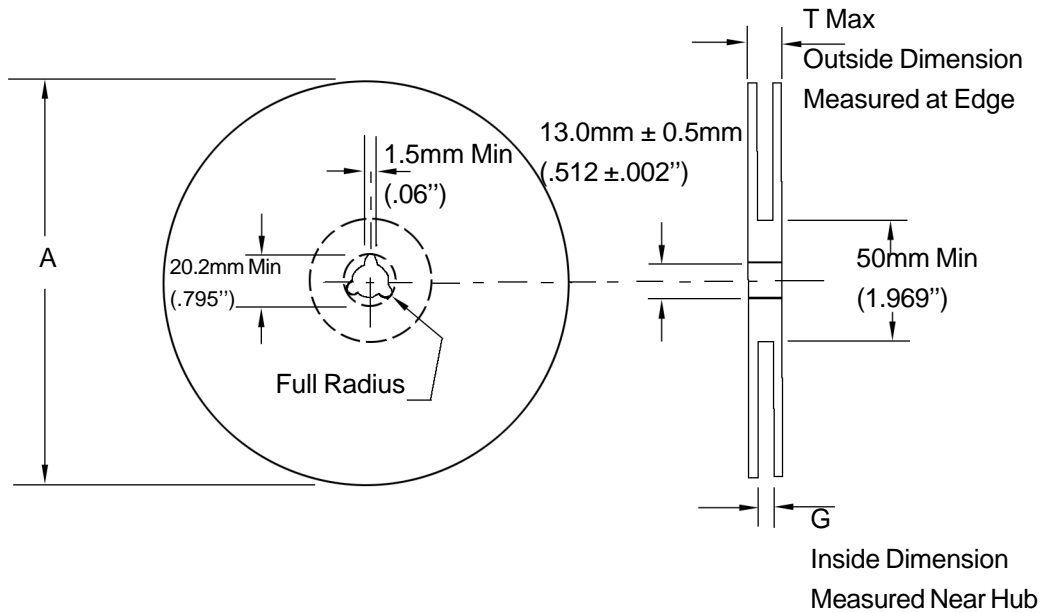
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PACKAGE DIMENSIONS SC-88A/SOT-353



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

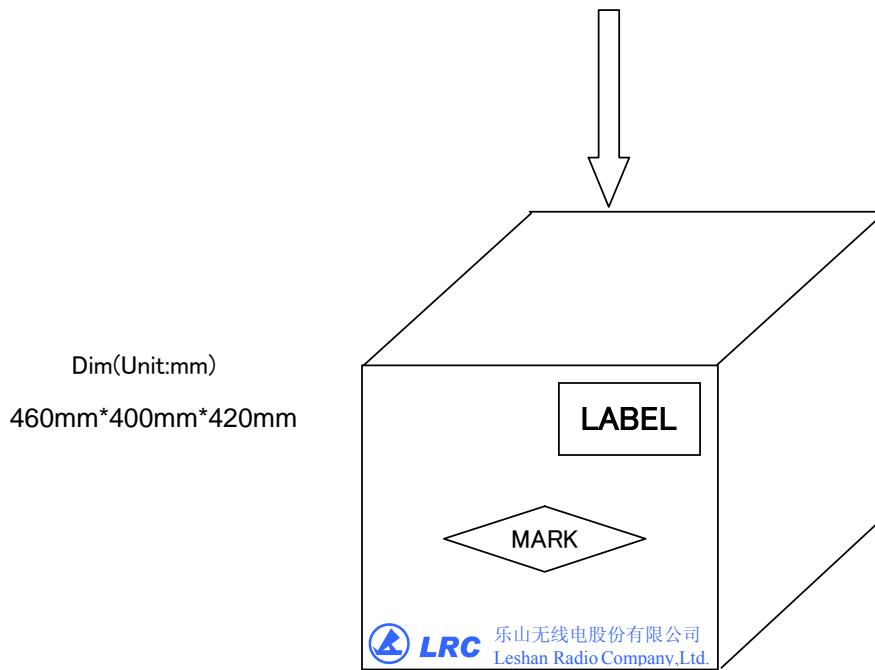
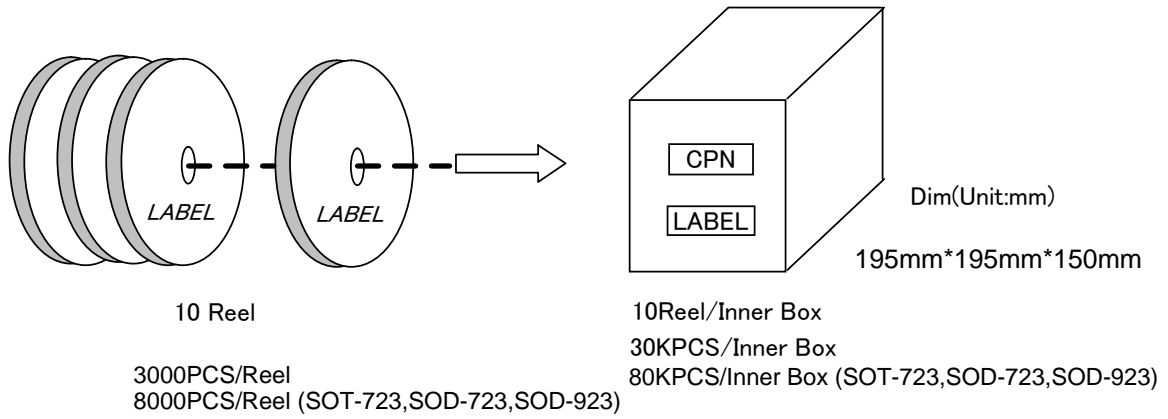
Temperature: 5 to 40 Deg.C (20 to 30 Deg. C is preferred)

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



12 Inner Box/Carton

360KPCS/Carton
960KPCS/Carton (SOT-723,SOD-723,SOD-923)