

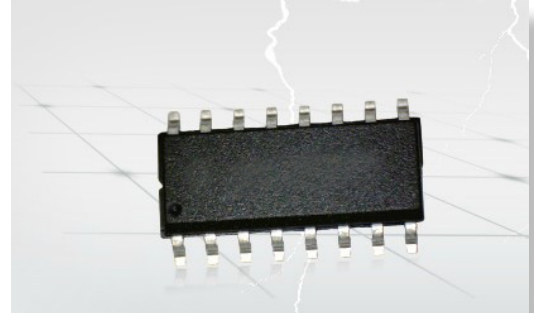
TVS/ESD Arrays

RLSO16A058LC Series

TVS/ESD Arrays - RLSO16A058LC Series

Features

- IEC61000-4-2 ESD 15KV Air,8KV contact compliance
- Protects eight I/O lines
- Peak power dissipation of 500W under 8/20 s waveform
- Low leakage current
- Low capacitance and clamping voltages
- Solid-state silicon avalanche technology
- Lead Free/RoHS compliant
- Solder reflow temperature:Pure Tin-Sn,260-270
- Flammability rating UL 94V-0



Mechanical Characteristics

- SOIC-16 surface mount package
- Working voltage : 5V
- Marking: Logo, Marking Code, Date Code & Pin One
- Defined By Dot on Top of Package

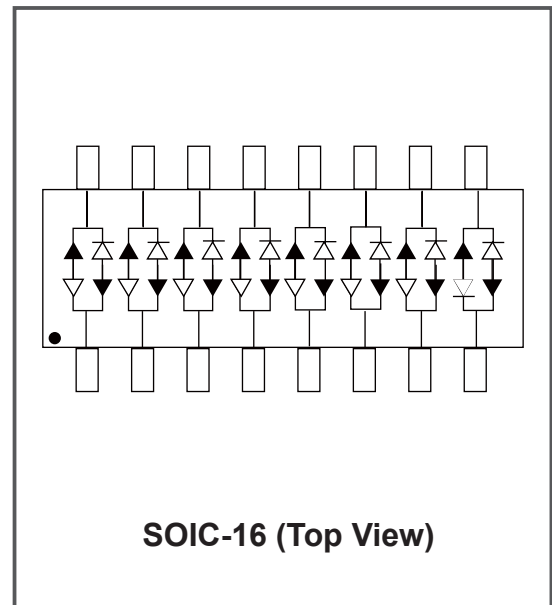
Applications

- Wireless communication circuit
- WAN equipment
- CSU / DSU
- Multiplexers
- Routers
- RS-232 (V.28)
- RS-422 (V.11,X.21)
- Ethernet-10/100 base T
- Low-voltage ASICs

Life Support Note

- Not Intended for Use in Life Support or Life Saving Applications
- The products shown herein are not designed for use in life sustaining or life saving applications unless otherwise expressly indicated

Pinout and Functional Block Diagram



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Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak pulse power (tp=8/20 s waveform)	P _{pp}	150	Watts
ESD voltage (HBM contact)	V _{ESD}	±8	A
ESD voltage (AIR contact)	V _{ESD}	±15	Kv
Lead soldering temperature	TL	260	°C
Storage & operating temperature range	TSTG ,TJ	-55~+150	°C

Electrical Characteristics Per Lin (@ 25°C Unless Otherwise Specified)

Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	5	V
Reverse breakdown voltage	V _{BR}	IBR=1mA	6.0	-	-	V
Reverse leakage current	I _R	VR =5V each I/O pin	-	-	10	µA
Clamping voltage (tp=8/20s)	V _C	IPP=1A	-	-	9.8	V
Clamping voltage (tp=8/20s)	V _C	I _{IPP} =10A	-	-	17	V
Off state junction capacitance	V _C	0Vdc,f=1MHZ between I/O pins and GND	-	-	15	pF

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Typical Characteristics

Figure 1. Power Derating Curve

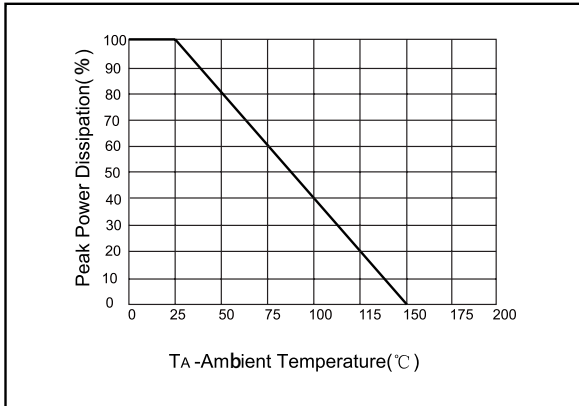


Figure 2. Pulse Waveforms

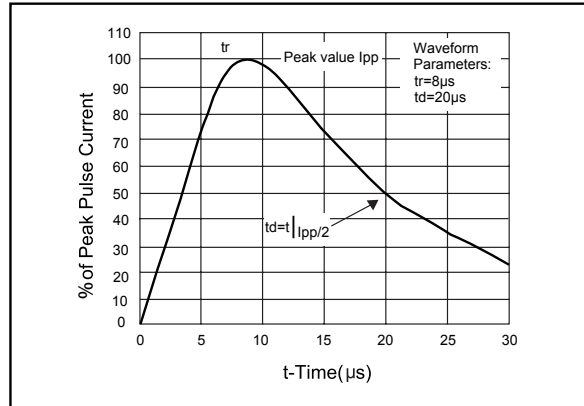


Figure 3. Non-Repetitive Peak Pulse vs Pulse Time

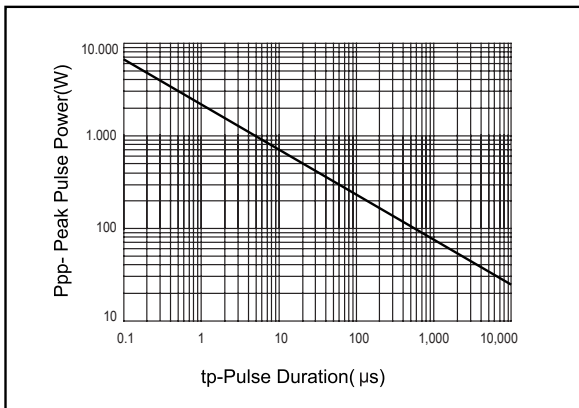
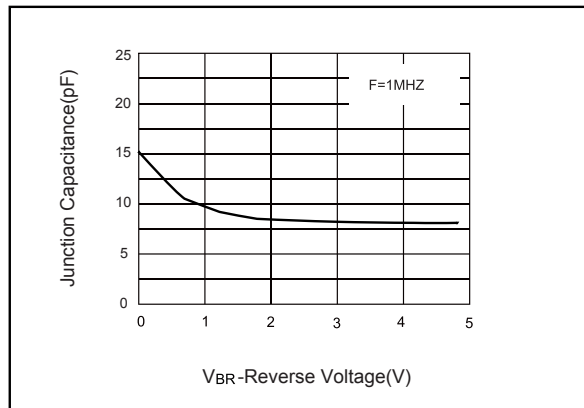
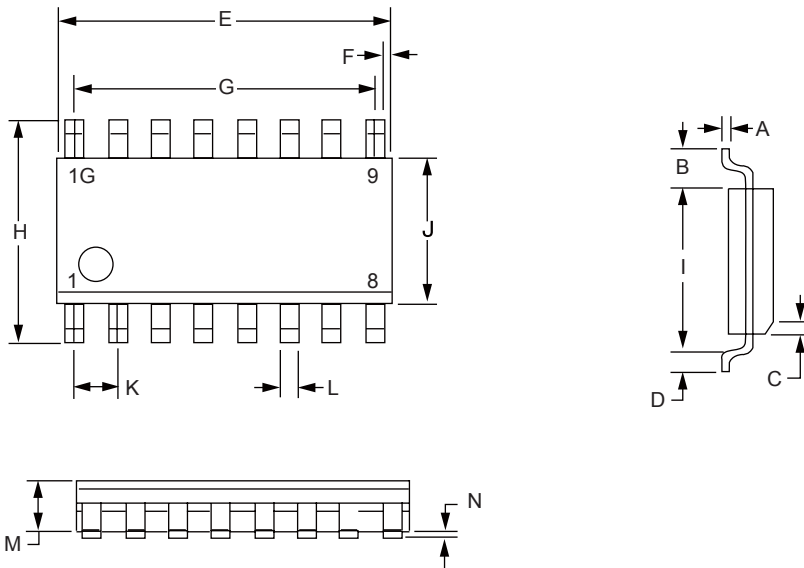


Figure 4. Capacitance vs. Reverse Voltage



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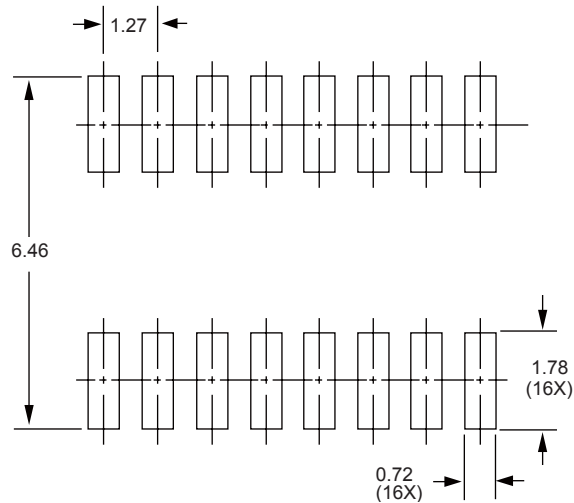
Package dimension SOIC-08



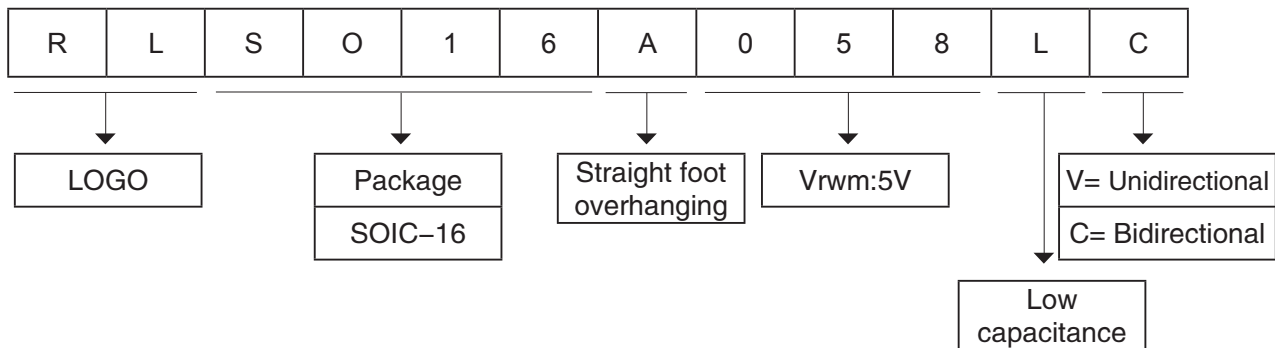
Dimensions				
DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	0.007	0.010	0.19	0.25
B	0.041	1.04		1.04
C	0.010	0.020	0.25	0.50
D	0.020	0.035	0.50	0.9
E	0.386	0.394	9.80	10.0
F		0.010		0.25
G		0.350		8.89
H	0.228	0.244	5.80	6.20
J	0.150	0.157	3.80	4.00
K		0.050		1.27
L	0.014	0.020	0.35	0.51
M	0.053	0.069	1.35	1.75
N	0.004	0.010	0.10	0.25

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Soldering footprint



Part Number Code



Ordering Information

Part Number	Package	Min. Order Qty.
RLSO16A058LC	SOIC-16	3000pcs

Warehouse Storage Conditions of Products

Storage Conditions:

1. Storage Temperature: -10°C~+40°C
2. Relative Humidity: ≤75%RH
3. Keep away from corrosive atmosphere and sunlight.
4. Period of Storage: 1 year

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