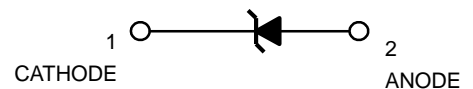


Features

- I Small Body Outline Dimensions:0.039" x 0.024"(1.0 mmx 0.60mm)
- I Low Body Height: 0.020" (0.50 mm)
- I Stand-off Voltage:3.3V
- I Low Leakage
- I Response Time is Typically < 1 ns
- I ESD Rating of Class 3 (> 16 kV) per Human Body Model
- I IEC61000-4-2 Level 4 ESD Protection
- I These are Pb-Free Devices
- I We declare that the material of product compliance with RoHS requirements.
- I S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable



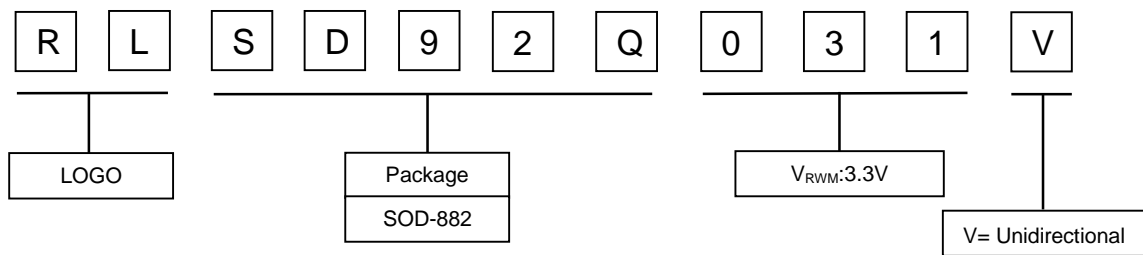
Electrical symbol



Applications

- I Cellular phones audio
- I MP3 players
- I Digital cameras
- I Portable applications
- I Mobile telephone

Part Number Code



Absolute Maximum Rating

Rating	Symbol	Value	Units
Max. Peak Pulse Power (tp =8/20μs)	P _{PK}	150	mW
ESD Voltage (Contact)	V _{ESD}	±8	Kv
ESD Voltage (Air)	V _{ESD}	±15	Kv
Lead Solder Temperature - Max . (10 Second Duration)	T _L	260	°C
Operating Temperature	T _J	-55 to 150	°C
Storage Temperature	T _{STG}	-55 to 150	°C

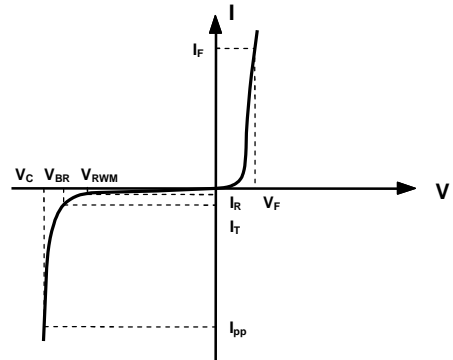
Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Type Number	Reverse Stand-Off Voltage	Min. Breakdown Voltage	Max. Peak Pulse Voltage @8/20μS	Max. Peak Pulse Current @8/20μS	Max. Reverse Leakage @V _{RWM}	Typical Capacitance
	V _{RWM}	V _{BR} @1mA	V _C @ Max. I _{PP}	I _{PP}	I _R @V _{RWM}	DC=0V C _J @ 1 MHz
	V	V	V	A	μA	pF
RLSD92Q031V	3.3	5.0	7.4	13.5	1.0	70



Electrical Parameters (T=25°C)

Symbol	Parameter
I_{pp}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{pp}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F



Characteristic Curves

Fig 1. 8/20µs Pulse Waveform

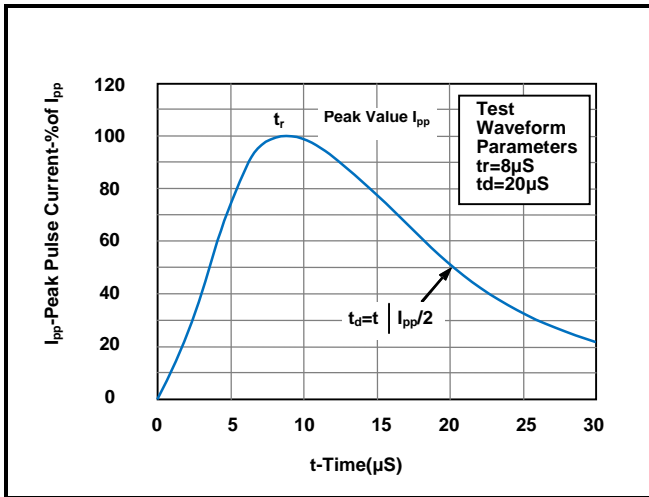


Fig 3. Power Derating Curve

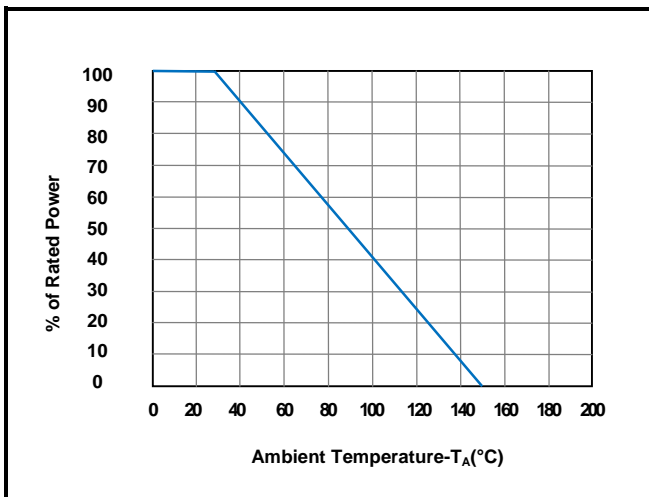


Fig2.ESD Pulse Waveform (according to IEC61000-4-2)

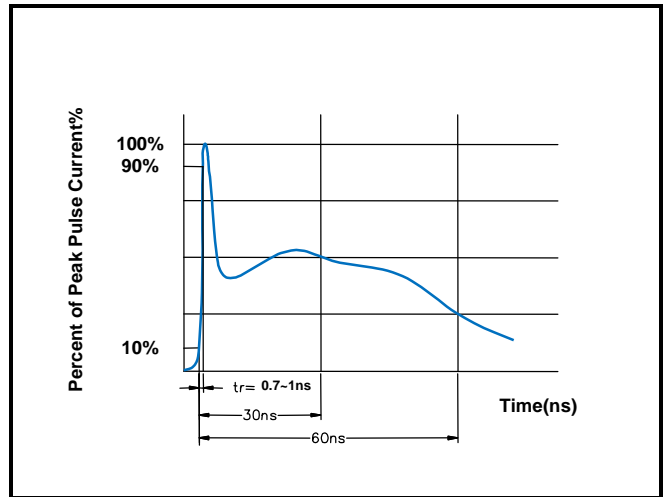
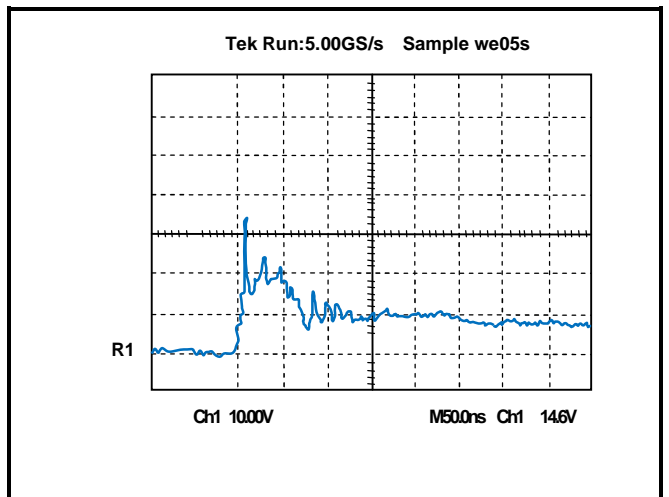
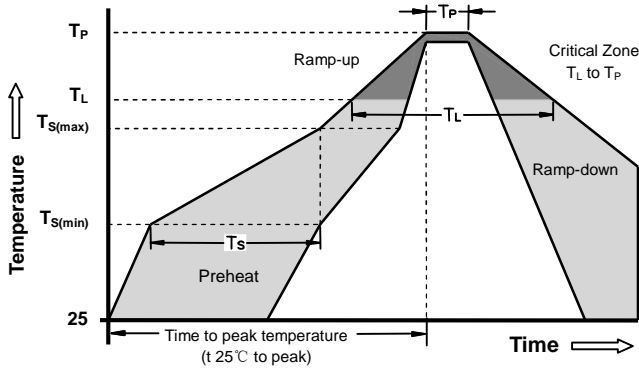


Figure 4.ESD Clamping(8KV Contact per IEC61000-4-2)

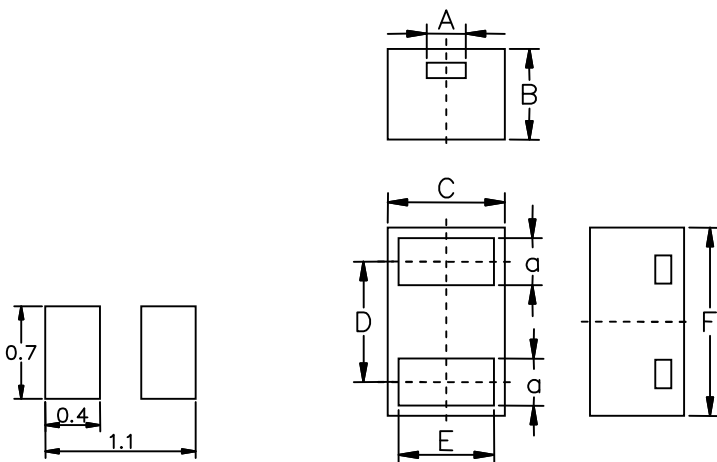


Soldering Parameters - Reflow Soldering (Surface Mount Devices)



Reflow Condition		Pb - Free assembly
Pre Heat	-Temperature Min ($T_{s(min)}$)	150°C
	-Temperature Max ($T_{s(max)}$)	200°C
	- Time (min to max) (t_s)	60 -180 Seconds
Average ramp up rate (Liquids Temp T_L) to peak		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	- Temperature (T_L) (Liquids)	217°C
	- Time (min to max) (t_s)	60 -150 Seconds
Peak Temperature (T_P)		260 +0/-5°C
Time within 5°C of actual peak Temperature (t_p)		20 - 40 Seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max
Do not exceed		280°C

Dimensions



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.20		0.008	
B	0.465	0.5	0.018	0.02
C	0.55	0.65	0.022	0.026
D	0.64		0.025	
E	0.44	0.54	0.017	0.021
F	0.95	1.05	0.037	0.041
a	0.20	0.30	0.008	0.012

Part Number	Component package	Quantity	Reel Size	Molding compound flammability rating	Lead Finish
RLSD92Q031V	SOD-882	10000	7 inch	UL 94V-0	Lead Free

