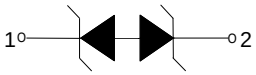
Features

- Watts Peak Pulse Power per Line (tp = 8/20μs)
- Working voltages: 8V
- Low Leakage Current
- Low operating and clamping voltages
- Lead Free/RoHS compliant
- Solid-state silicon avalanche technology
- Provides ESD protection to IEC61000-4-2(ESD): ± 20kV (air discharge), ±20kV (contact discharge)

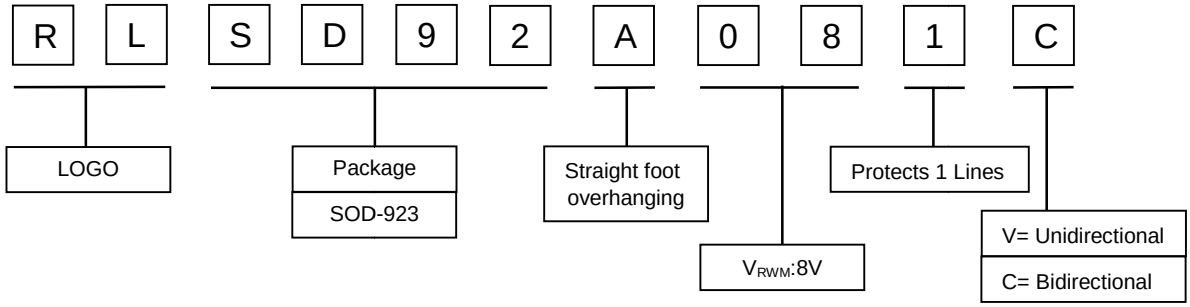
Electrical symbol



Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Pagers Peripherals

Part Number Code



Absolute Maximum Rating

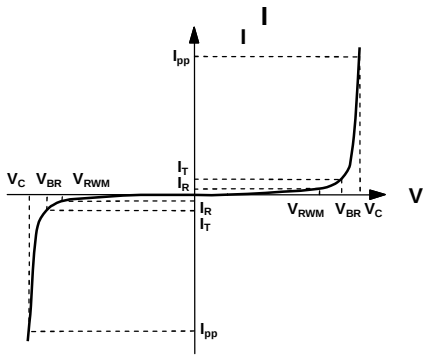
Rating	Symbol	Value	Units
Maximum Reverse Peak Pulse Current	I_{PP}	4	A
ESD Voltage (Contact)	V_{ESD}	±20	Kv
ESD Voltage (Air)	V_{ESD}	±20	Kv
Maximum junction temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 to +150	°C
Power Dissipation	P_O	150	mW

Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{RWM}	Reverse Working Peak Voltage	I_R=±1μA			8.0	V
V_{BR}	Reverse Breakdown Voltage Pin 1 to 2	I_T=±1mA	8.2		14	V
I_R	Reverse Current	V_{RWM}=±8V			1.0	μA
V_C	Clamping Voltage	I_{PP}=±4A,tp =8/20μ			30	V
C_D	Diode Capacitance	V_R=0V,f=1MHz		20	30	pF

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



Characteristic Curves

Fig 1. 8/20μs Pulse Waveform

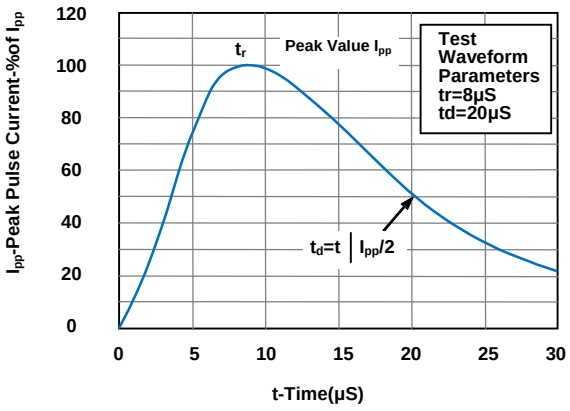


Fig2.ESD Pulse Waveform (according to IEC61000-4-2)

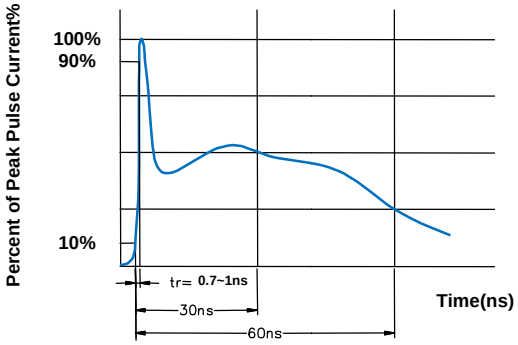


Fig 3. Power Derating Curve

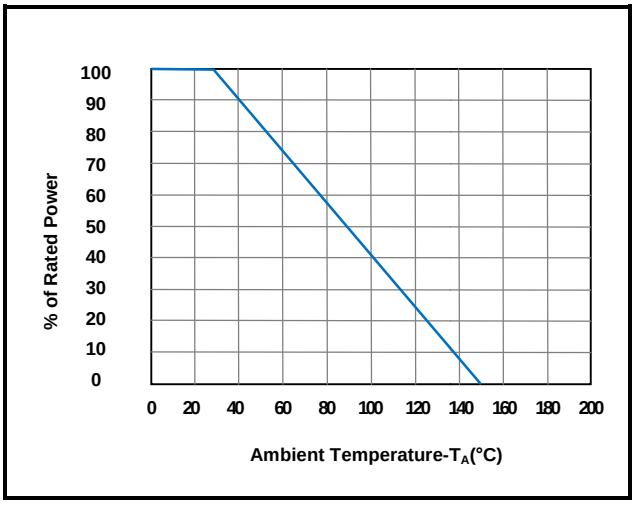
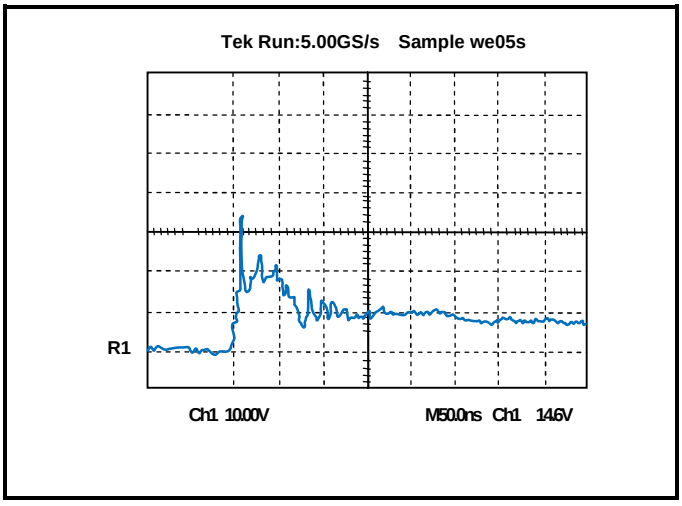
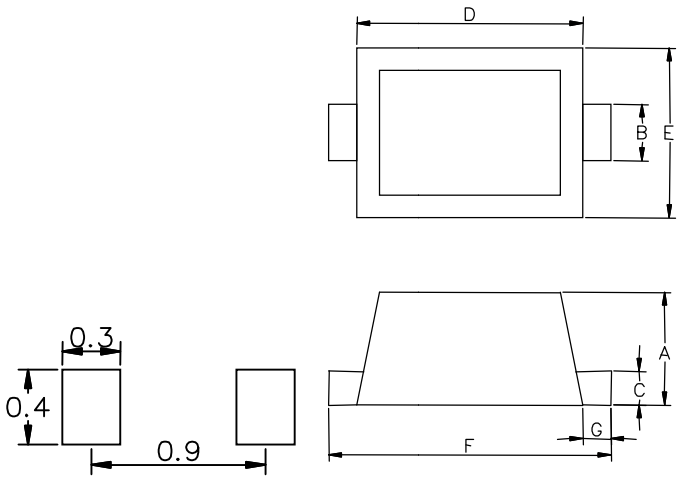


Figure 4.ESD Clamping(8KVContact per IEC61000-4-2)



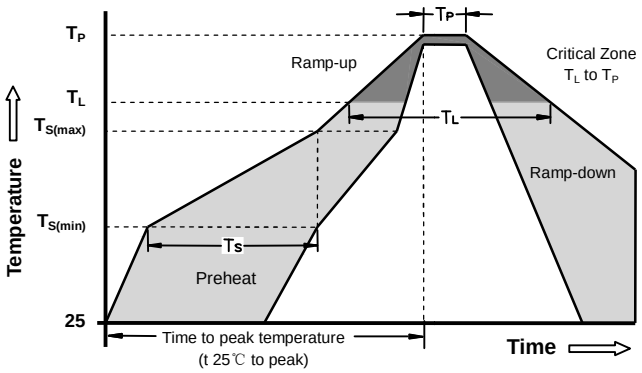
Dimensions & Recommended soldering footprint(mm)



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.37	0.45	0.013	0.016
B	0.15	0.25	0.006	0.010
C	0.07	0.17	0.003	0.007
D	0.75	0.85	0.030	0.033
E	0.55	0.65	0.022	0.026
F	0.95	1.05	0.037	0.041
G	0.05	0.15	0.002	0.006

Part Number	Marking	Component package	Quantity	Reel Size	Molding compound flammability rating	Lead Finish
RLSD92A081C	C	SOD-923	8000	7 inch	UL 94V-0	Matte tin（RoHS Compliant）

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 TL - 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