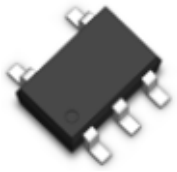
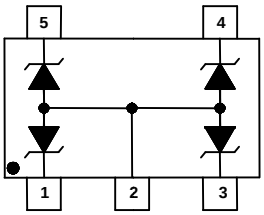
Features

- 150 Watts Peak Pulse Power per Line (tp = 8/20μs)
- Working voltages: 5V
- 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): ±16kV (air discharge),±9kV (contact discharge)



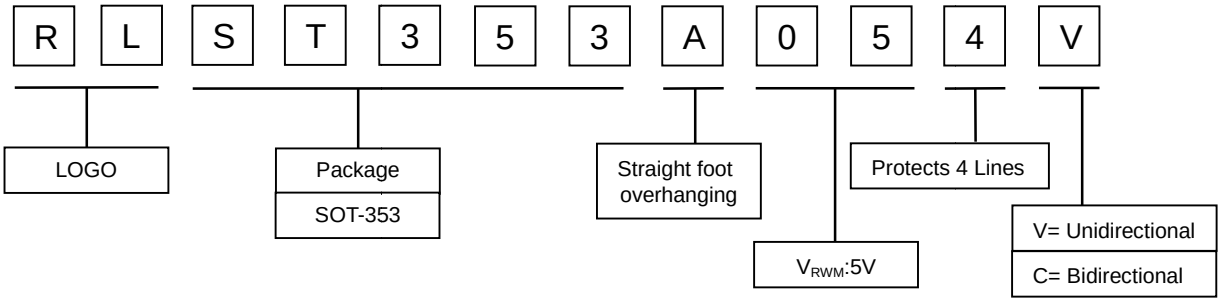
Electrical symbol



Applications

- Cellular Handsets and Accessories
- Cordless Phones
- Personal Digital Assistants (PDA's)
- Notebooks and Handhelds
- Portable Instrumentation
- Peripherals
- MP3 Players

Part Number Code



Absolute Maximum Rating

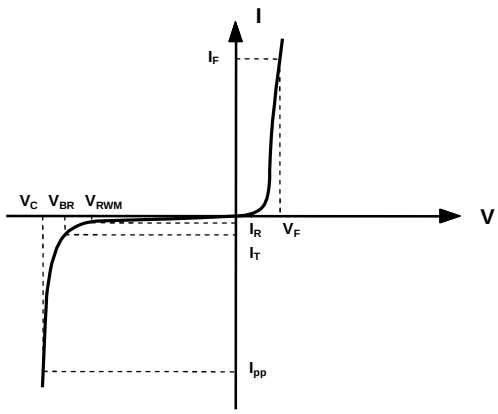
Rating	Symbol	Value	Units
Peak Pulse Power (tp =8/20μs)	P_{PK}	150	Watts
ESD Voltage (Contact)	V_{ESD}	±9	Kv
ESD Voltage (Air)	V_{ESD}	±16	Kv
Lead Soldering Temperature	T_L	260 (10 sec.)	°C
Operating Temperature Range	T_{op}	-40 to 125	°C
Storage Temperature	T_{STG}	-40 to 125	°C

Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Type Number	Reverse Stand-Off Voltage	Minimum Breakdown Voltage	Peak Pulse Voltage @8/20μS	Peak Pulse Current @8/20μS	Reverse Leakage @V_{RWM}	Typical Capacitance
	V_{RWM}	V_{BR} @1mA	V_C@1A	I_{PP}	I_R@V_{RWM}	DC=0V C_J@ 1 MHz
	V	V	V	A	μA	pF
RLST353A054V	5	6.1	9.8	15	1	90

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

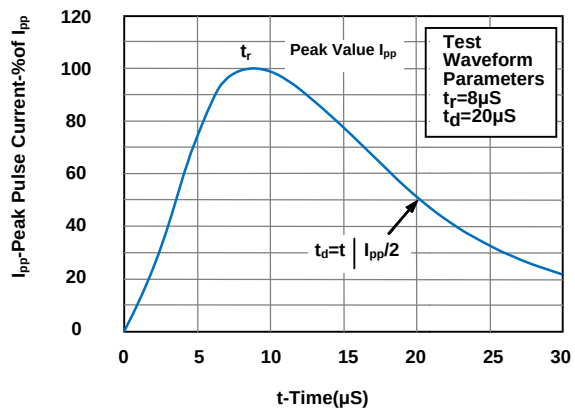


Fig2.ESD Pulse Waveform (according to IEC61000-4-2)

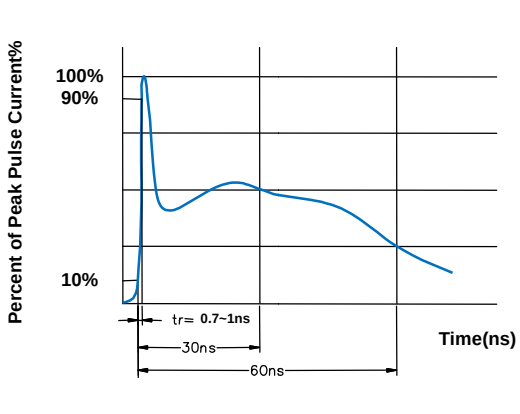


Fig 3. Power Derating Curve

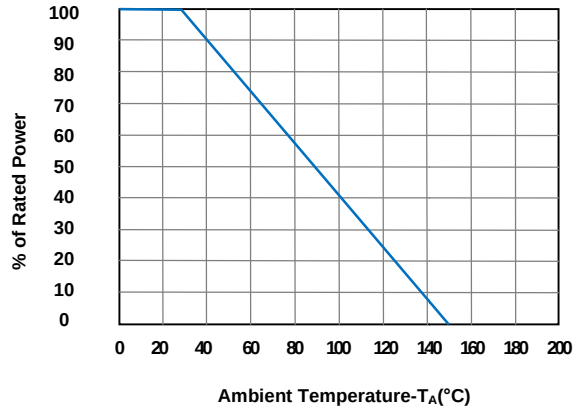
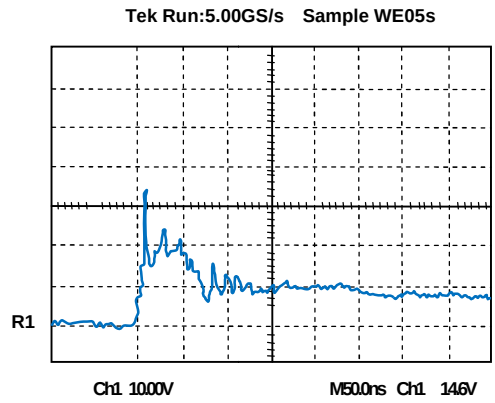
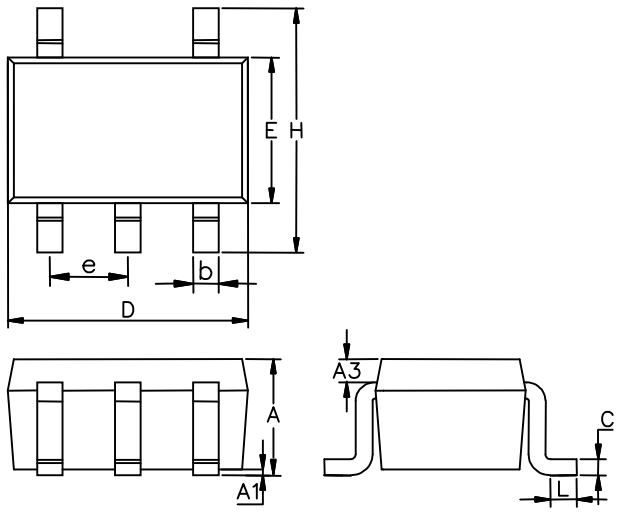


Figure 4.ESD Clamping(8KV Contact per IEC61000-4-2)



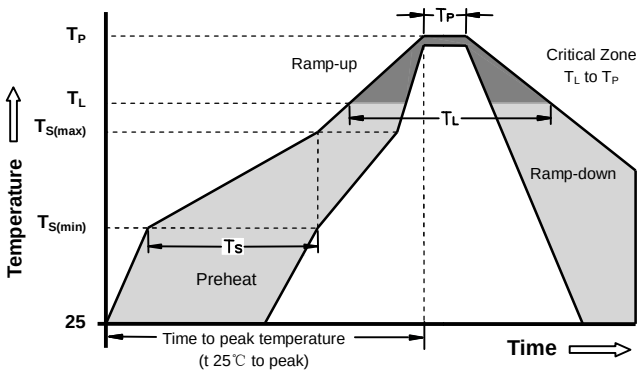
Dimensions



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.80	1.10	0.031	0.043
A1	0.00	0.10	0.00	0.004
A3	0.2REF		0.08REF	
b	0.10	0.30	0.004	0.012
C	0.10	0.25	0.004	0.010
D	1.80	2.20	0.07	0.086
E	1.15	1.35	0.045	0.053
e	0.65BSC		0.026BSC	
L	0.10	0.30	0.004	0.012
H	2.00	2.20	0.078	0.086

Part Number	Marking	Component package	Quantity	Reel Size	Molding compound flammability rating	Lead Finish
RLST353A054V	WE	SOT-353	3000	7 inch	UL 94V-0	Lead Free

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