

**Features**

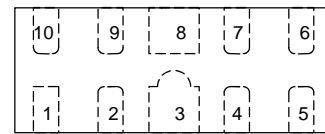
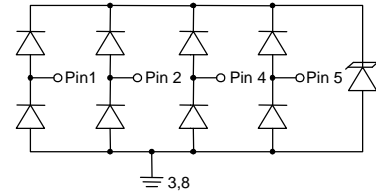
- I Solid-state silicon-avalanche technology
- I Low operating and clamping voltage
- I Up to four I/O Lines of Protection
- I Ultra low capacitance: 0.3pF typical(I/O to I/O)
- I Low Leakage
- I Low operating voltage:5V
- I Flow-Through design



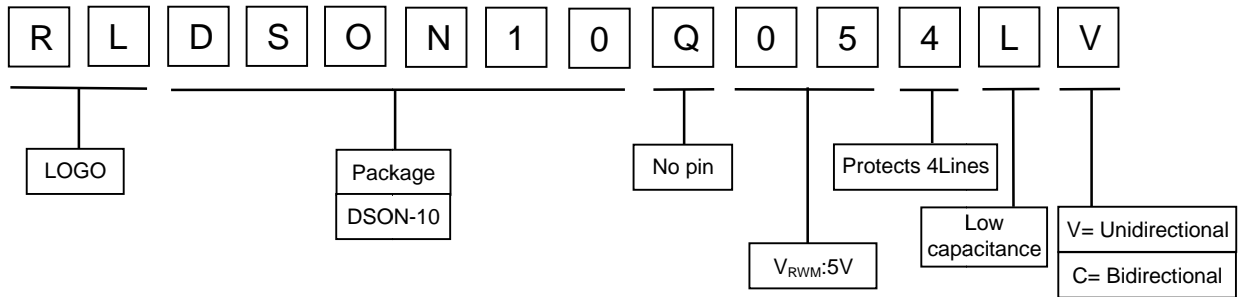
**Applications**

- I Digital Visual Interface(DVI)
- I MDDI Ports
- I Display Port TM Interface
- I PCI Express
- I High Definition Multi-Media Interface(HDMI)
- I eSATA Interfaces

**Circuit Diagram & PIN Diagram**



**Part Number Code**



**Absolute Maximum Rating**

Rating	Symbol	Value	Units
Peak Pulse Power (tp =8/20µs)	P <sub>PP</sub>	150	Watts
ESD Voltage (Contact)	V <sub>ESD</sub>	12	kV
ESD Voltage (Air)	V <sub>ESD</sub>	17	kV
Operating Temperature	T <sub>J</sub>	-55 to 125	°C
Storage Temperature	T <sub>STG</sub>	-55 to 150	°C

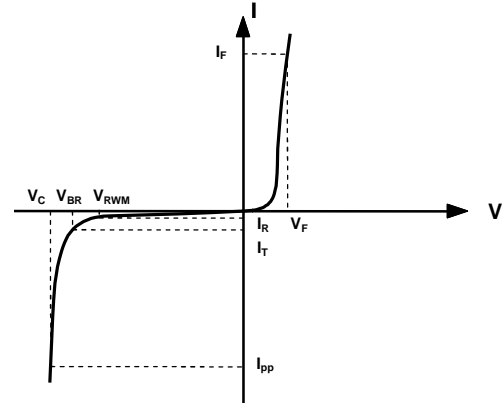
**Electrical Characteristics (@ 25°C Unless Otherwise Specified)**

Type Number	Reverse Stand-Off Voltage	Minimum Breakdown Voltage	Peak Pulse Voltage @8/20µS	Peak Pulse Current @8/20µS	Reverse Leakage @V <sub>RWM</sub>	Typical Capacitance
	V <sub>RWM</sub>	V <sub>BR</sub> @1mA	V <sub>C</sub> @1A	I <sub>PP</sub>	I <sub>R</sub> @V <sub>RWM</sub>	DC=0V C <sub>J</sub> @ 1 MHz
	V	V	V	A	µA	pF
RLDSO10Q054LV	5	6	15	5	1	0.3



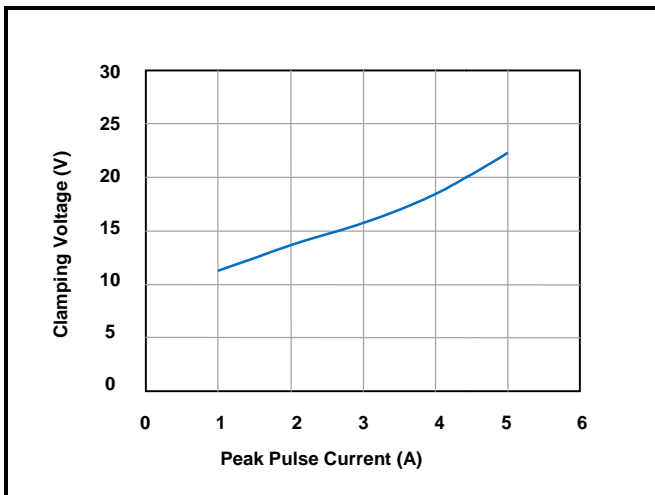
**Electrical Parameters (T=25°C)**

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 @ $I_F$

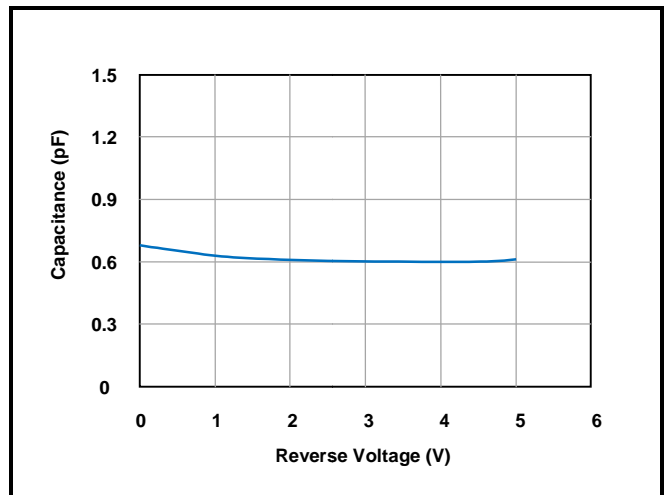


**Characteristic Curves**

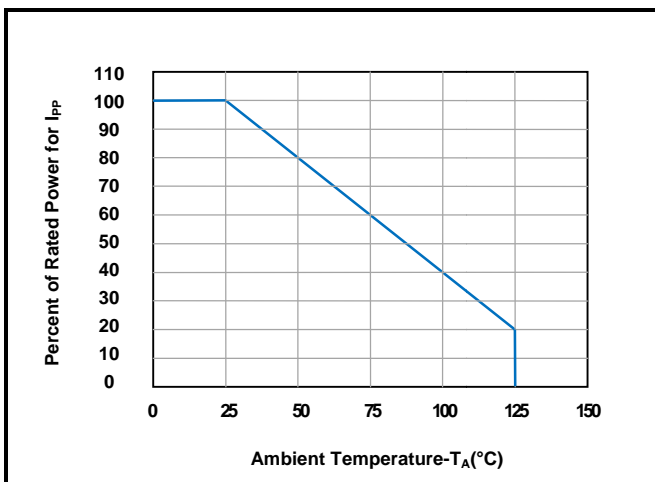
**Fig 1. Peak Pulse Current vs Clamping Voltage**



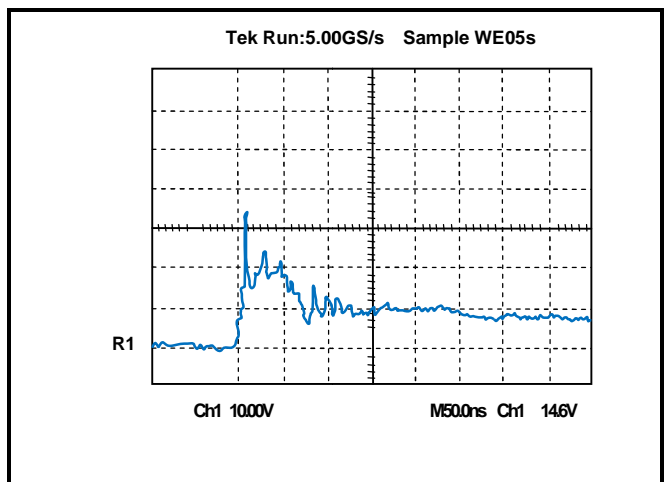
**Fig2. Reverse Voltage vs Capacitance**



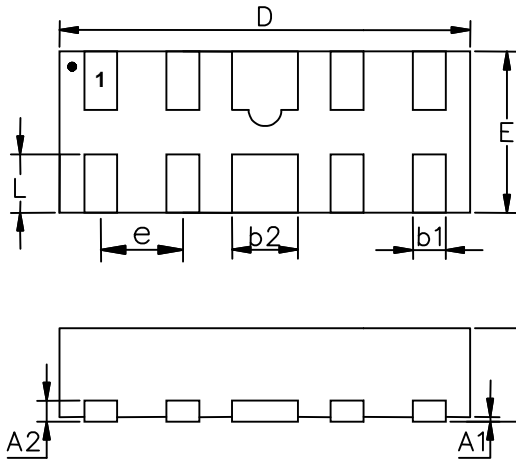
**Fig 3. Power Derating Curve**



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



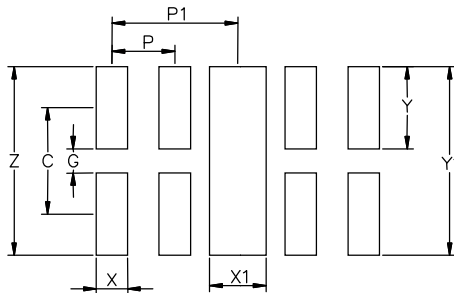
**Dimensions**



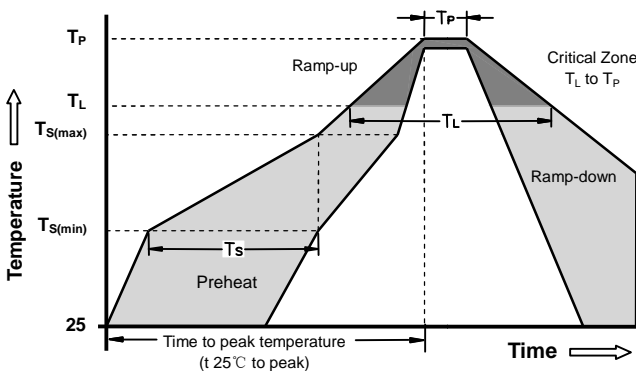
DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.50	0.65	0.02	0.026
A1	0.00	0.05	0.00	0.002
A2	0.13REF		0.005REF	
b1	0.15	0.25	0.006	0.010
b2	0.35	0.45	0.014	0.018
D	2.40	2.60	0.094	0.102
E	0.90	1.10	0.035	0.043
e	0.5BSC		0.02BSC	
L	0.30	0.425	0.012	0.017

Part Number	Packaging	Quantity	DFN-10L package	Molding compound flammability rating	Lead Finish
RLDSO10Q054LV	Tape and Reel	3000	2.5×1.0×0.58mm	UL 94V-0	Lead Free

**Mounting PAD (mm)**



**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



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [ESD Suppressors / TVS Diodes](#) category:*

*Click to view products by [Ruilongyuan](#) manufacturer:*

Other Similar products are found below :

[60KS200C](#) [D18V0L1B2LP-7B](#) [D5V0F4U5P5-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE8.2A](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#)  
[SMBJ33CATR](#) [SMBJ6.5A](#) [SMBJ8.0A](#) [ESD101-B1-02ELS E6327](#) [ESD112-B1-02EL E6327](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-](#)  
[HF](#) [3.0SMCJ33CA-F](#) [3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [JANTX1N6126A](#) [D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#) [SCM1293A-04SO](#)  
[ESD200-B1-CSP0201 E6327](#) [SM12-7](#) [CEN955 W/DATA](#) [VESD12A1A-HD1-GS08](#) [CPDQC5V0-HF](#) [D1213A-01LP4-7B](#) [ESD101-B1-02EL](#)  
[E6327](#) [AOZ8808DI-03](#) [5KP15A](#) [5KP48A](#) [5KP90A](#) [ESD3V3D7-TP](#) [15KPA36A-LF](#) [P4KE56CA](#) [P4KE68A](#) [P4KE91CATR](#) [P6KE120A](#)  
[P6KE13CA](#) [P6KE43CA](#) [P6KE6.8CA](#) [P6KE8.2](#) [P6SMBJ20CA](#) [JANTX1N6072A](#) [SR2835ESKG](#) [SA90CA](#)