

LGRV05-4LT1G

STEERING DIODE/TVS ARRAY COMBO

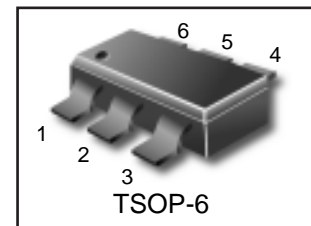
MECHANICAL CHARACTERISTICS

- Molded JEDEC TSOP-6
- Weight 16 milligrams (Approximate)

Features

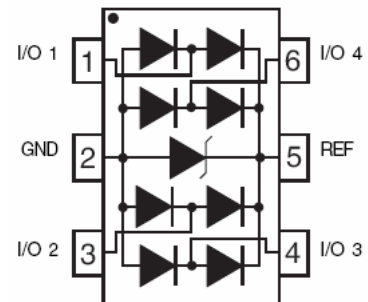
- 300 Watts Peak Pulse Power per Line ($t_p=8/20 \mu s$)
- Low Clamping Voltage
- PROTECTS FOUR (4) LINES
- ULTRA LOW CAPACITANCE :3.5 Pf Typical
- RoHS Compliant on Lead Free Versions

LGRV05 - 4LT1G



APPLICATIONS

- Ethernet – 10/100/1000 Base T
- Cellular Phones
- Handheld & Portable Electronics
- Video/Graphics Card
- USB 2.0 Interface
- DVI Interface
- We declare that the material of product compliance with RoHS requirements.



IEC COMPATIBILITY(EN61000-4)

- 61000-4-2 (ESD): Air – 15kV, Contact – 8kV
- 61000-4-4 (ESD): 40A – 5/50ns
- 61000-4-5 (Surge): 24A, 8/20 μs -Level 2 (Line-Gnd) & Level 3 (Line –Line)

ORDERING INFORMATION

Device	Package	Shipping
LGRV05 - 4LT1G	TSOP-6	3000/Tape & Reel

DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p=8/20 \mu s$) See Figure 1	P_{PP}	300	Watts
Operating Temperature	T_J	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C
Forward Surge Rating (1/20 seconds @ 25°C, $I_F=10mA$)	V_F	1.5	Volts
Peak Pulse Current ($t_p= 8/20 \mu s$)	I_{PP}	12	Amps

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ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	RATED STANDOFF VOLTAGE (See Note1) V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE (See Note1) @1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (See Fig.2) (See Note 1) @ $I_p=1A$ V_C VOLTS	MAXIMUM CLAMPING VOLTAGE (See Note1) @ $I_p=5A$ V_C VOLTS	MAXIMUM LEAKAGE CURRENT (See Note1) @ V_{WM} I_D μA	TYPICAL CAPACITANCE (See Note1) @0V,1MHz $C_{J(SD)}$ pF
LGRV05-4LT1G	5.0	6.0	12.0	15.0	5	3.5

Note 1: From I/O Pin to Ground.

FIGURE 1

PEAK PULSE POWER VS PULSE TIME

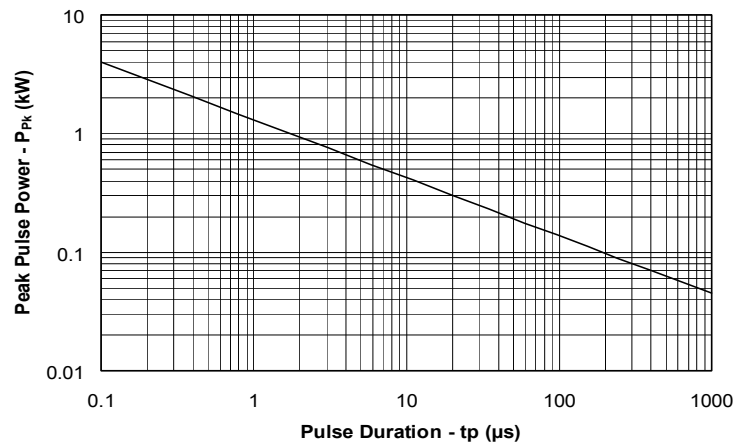
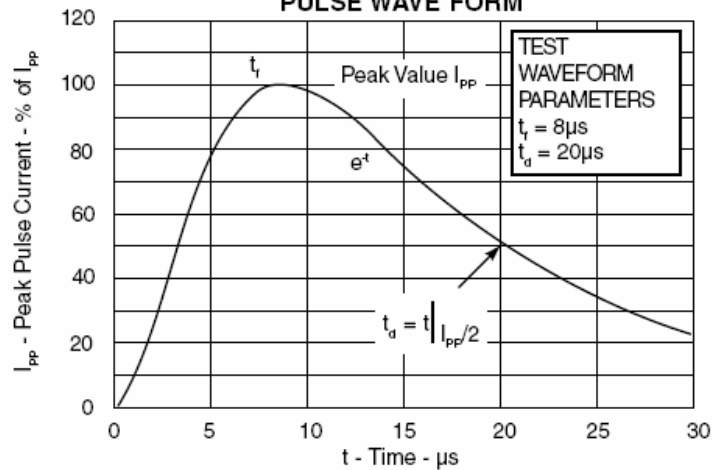
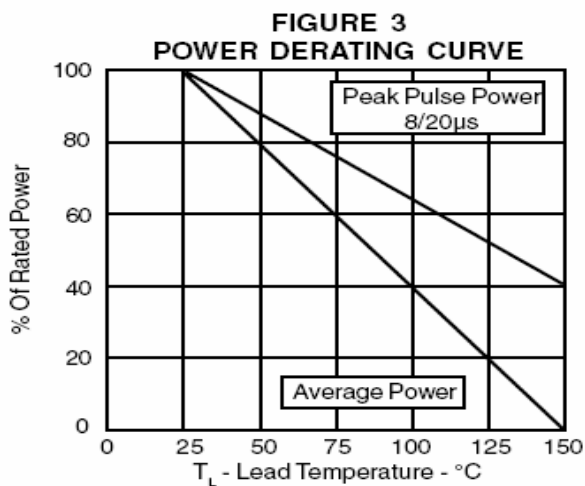


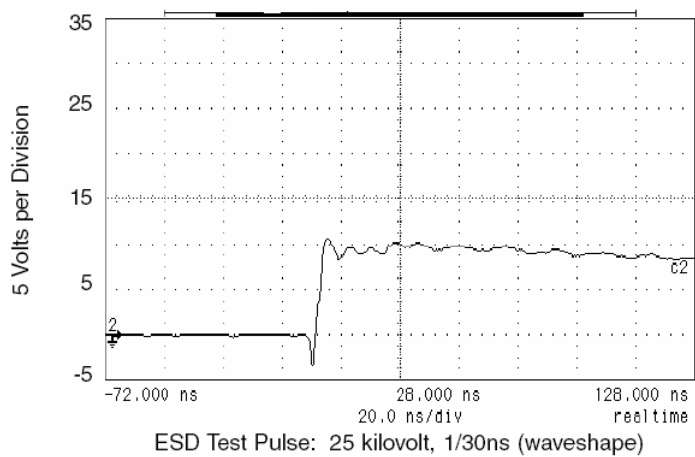
FIGURE 2
PULSE WAVE FORM



LGRV05 - 4LT1G

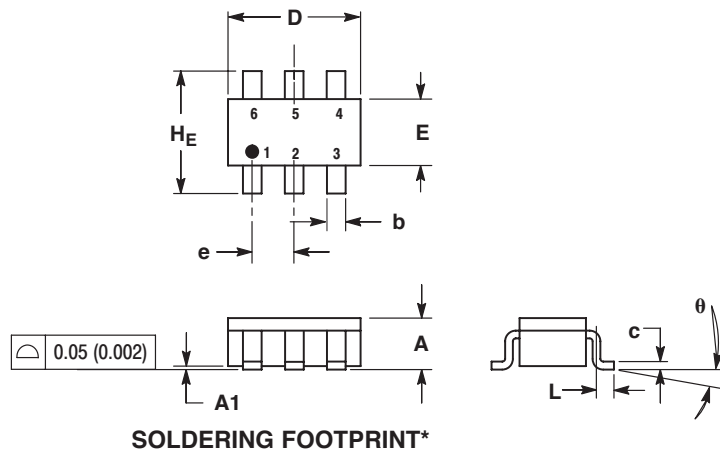


**FIGURE 4
OVERSHOOT & CLAMPING VOLTAGE FOR LGRV05-4LT1G**



LGRV05 - 4LT1G

TSOP-6
 SOT23-6, SC59-6
 CASE 318G-02
 ISSUE S

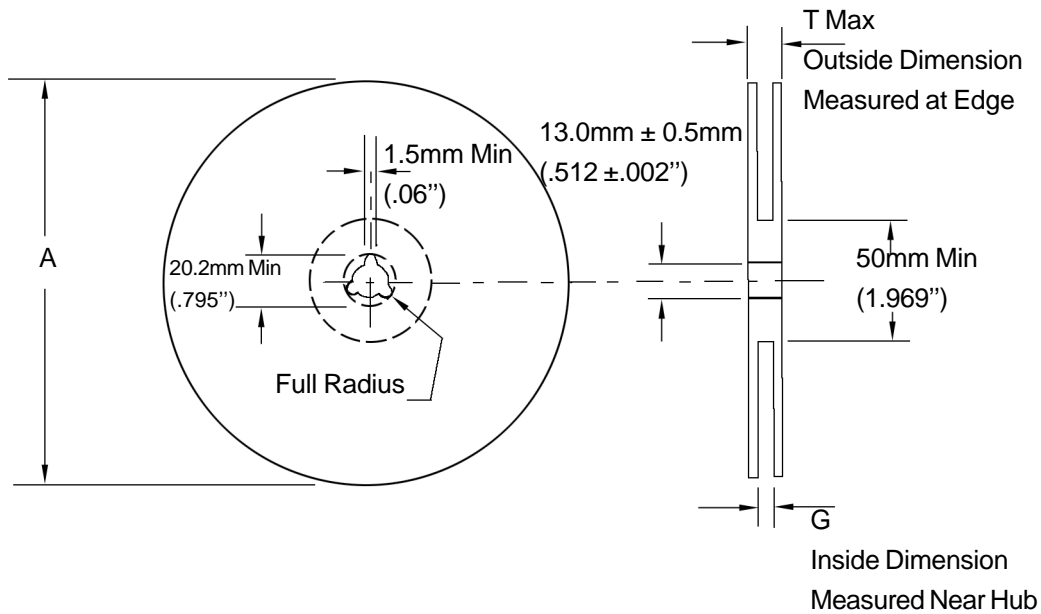


NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETER.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS A AND B DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.90	1.00	1.10	0.035	0.039	0.043
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.25	0.38	0.50	0.010	0.014	0.020
c	0.10	0.18	0.26	0.004	0.007	0.010
D	2.90	3.00	3.10	0.114	0.118	0.122
E	1.30	1.50	1.70	0.051	0.059	0.067
e	0.85	0.95	1.05	0.034	0.037	0.041
L	0.20	0.40	0.60	0.008	0.016	0.024
HE	2.50	2.75	3.00	0.099	0.108	0.118
θ	0°	-	10°	0°	-	10°

EMBOSSED TAPE AND REEL DATA FOR DISCRETES



Size	A Max	G	T Max
8 mm	178.0mm (7.0")	8.4mm+1.5mm, -0.0 (.33"+.039", -0.00)	10.9mm (.43")

Reel Dimensions

Metric Dimensions Govern — English are in parentheses for reference only

Storage Conditions

Temperature: 5 to 40 Deg.C (20 to 30 Deg. C is preferred)

Humidity: 30 to 80 RH (40 to 60 is preferred)

Recommended Period: One year after manufacturing

(This recommended period is for the soldering condition only. The characteristics and reliabilities of the products are not restricted to this limitation)

Shipment Specification

