Gas Discharge Tubes Datasheet

CG9 Series Gas Discharge Tubes

RoHS 🕅 🔍



Web Resources

Download ECAD models, order samples, and find technical recources at <u>www.littelfuse.com</u>

Agency Approvals

Agency	Agency File Number
(h)	E320116

Description

Littelfuse CG9 two electrode high voltage (1.0-5.5 kV) devices are designed for surge protection and high isolation applications, and for applications for which bias voltages or signal levels of several hundred volts are normally present.

Features

- Rugged Ceramic-metal construction
- Voltage Range 1000–5500 V
- 10 kA 8/20 µs surge capability
- Low capacitance (<1.0 pF)
- Available in T&R packaging

Applications

- Antenna circuit
- Power supplies
- CATV equipment
- Air conditioning

- Available with leads
- RoHS compliant and Lead-free
- Test equipment
- Set-top box
- Renewable energy

Two Electrode GDT Graphical Symbol



Electrical Characteristics

	Device Specifications (at 25 °C)					Service Life			
Part Number	DC Breakdown in Volts (@ 100 V/s)	Impulse Break- down in Volts (@100 V/µs)	Impulse Break- down In Volts (@1 kV/µs)	Insulation Resistance	Capacitance (@1 MHz)	10 Operations 50 hZ, 1s	1 Operation 50 hZ, 0.18 s, 9 Cycles	10 Operations @ 8/20 μs	1 Operation @ 8/20 μs
CG91.0	850~1150	1300	1400	>10 GΩ	<1 pF	10 A	65 A	10 kA	15 kA
CG91.2	960~1440	1900	2000	>10 GΩ	<1 pF	10 A	65 A	10 kA	15 kA
CG91.5	1200~1800	2200	2300	>10 GΩ	<1 pF	10 A	65 A	10 kA	15 kA
CG91.8	1440~2160	2600	2700	>10 GΩ	<1 pF	10 A	65 A	10 kA	15 kA
CG92.0	1600~2400	3500	3800	>10 GΩ	<1 pF	10 A	65 A	10 kA	15 kA
CG92.5	2000~3000	3900	4000	>10 GΩ	<1 pF	10 A	20 A	10 kA	15 kA
CG93.5	2800~4200	4900	5000	>10 GΩ	<1 pF	10 A	20 A	10 kA	15 kA
CG94.5	3600~5400	5800	6000	>10 GΩ	<1 pF	10 A	20 A	10 kA	15 kA
CG95.5	4675~6325	6500	7000	>10 GΩ	<1 pF	5 A	10 A	10 kA	15 kA

Note: CG91.5LTR&CG91.8LTR don't have UL agency approval.

Product Characteristics

ltem	Test Condition
Operating & Storage Temperature	-40 °C to 125 °C
Product Marking	LF Logo, Voltage and date code; Black ink positive print
Material	Device & Wire: Tin plated 17.5±12.5 Microns

Soldering Parameters: Wave Soldering (Thru-Hole Devices)



Wave Parameter	Lead-Free Recommendation				
Preheat: (Depends on Flex Activation Temperature)	(Typical Industry Recommendation)				
Temperature Minimum	100 °C				
Temperature Maximum	150 °C				
PreheatTime	60–180 seconds				
Solder Pot Temperature	260 °C Maximum				
Solder Dwell Time	2–5 seconds				
Recommended Hand-Solder Parameters:					

Solder Iron Temperature: 350 °C +/- 5 °C

Heating Time: 5 seconds max. Note: These devices are not recommended for IR or Convection Reflow process.



Device Dimensions



Packaging Dimensions



Part Numbering System and Ordering Information



Option Code

L = Leaded/Bulk pack,100 pcs per tray L TR = Leaded/Tape & Reel,500 pcs per reel

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