

136 4091

**TWO ELECTRODE SURGE ARRESTERS**

**CG/CG2 Series**



**DESCRIPTION**

ClareREMtech's two electrode CG/CG2 Comgaps are designed for a high degree of surge protection at a low cost. The CG Series (75-110V) is primarily used for protection of test and communication equipment in which low voltage limits and extremely low arc voltages are required. The CG2 Series (145V-1000V) is used for the protection of test and communication equipment for which higher voltage limits and holdover voltages are necessary. Comgaps function as switches which dissipate a minimum amount of energy and therefore handle currents that far surpass other types of transient voltage protection.

**FEATURES**

- Small size
- Rugged ceramic-metal construction
- Low capacitance (<1pF)
- Non Radioactive 600-1000 V
- Available with or without leads
- Available in tape-and-reel packaging

**APPLICATIONS**

- Communication lines
- CATV equipment
- Test equipment
- Data lines
- Power supplies
- Instrumentation circuits
- Medical electronics

**APPROVALS**

- UL Recognized: File Number E111526
- Meets REA PE-80

**RATINGS (@ 25° C)**

Parameter	Min	Typ	Max	Units
DC Breakdown Voltage (± 20%)	60	75	90	V
	72	90	108	V
	88	110	132	V
	116	145	174	V
	184	230	276	V
	200	250	300	V
	240	300	360	V
	280	350	420	V
	376	470	564	V
	480	600	720	V
Insulation Resistance	640	800	960	V
	800	1000	1200	V
	10 <sup>10</sup>	-	-	Ω
Capacitance	-	-	1	pF
Operational Temperature	-40	-	+125	°C

(See detailed specifications for more information.)



## TWO ELECTRODE SURGE ARRESTERS

### SPECIFICATIONS

### CG/CG2 Series

All characteristics at 25°C

PARAMETER	CONDITIONS	SYMBOL	CG75			CG90			CG110			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>												
DC Breakdown	500V/s	$V_{BD}$	60	75	90	72	90	108	88	110	132	V
Impulse Breakdown	100V/ $\mu$ s	$V_{BD}$	-	-	400	-	-	400	-	-	450	V
Insulation Resistance	50V	$IR_{DC}$	$10^{10}$	-	-	$10^{10}$	-	-	$10^{10}$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	-	-	1	pF
Arc Voltage	I=5A min	$V_{ARC}$	-	10	-	-	10	-	-	10	-	V
<b>Life Ratings<sup>(1)</sup></b>												
Surge Life	500A (10/1000 $\mu$ s)	-	1000	-	-	1000	-	-	1000	-	-	shots
Max Current Surge	20kA (8/20 $\mu$ s)	-	5	-	-	5	-	-	5	-	-	shots
AC Current	10x 1sec @ 60Hz	-	-	-	20	-	-	20	-	-	20	A
DC Holdover Voltage	per REA PE-80, 0.2A	-	-	55	-	-	65	-	-	80	-	V

PARAMETER	CONDITIONS	SYMBOL	CG2-145			CG2-230			CG2-250			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>												
DC Breakdown	500V/s	$V_{BD}$	116	145	174	184	230	276	200	250	300	V
Impulse Breakdown	100V/ $\mu$ s	$V_{BD}$	-	-	500	-	-	600	-	-	625	V
Insulation Resistance	100V	$IR_{DC}$	$10^{10}$	-	-	$10^{10}$	-	-	$10^{10}$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	-	-	1	pF
Arc Voltage	I=5A min	$V_{ARC}$	-	15	-	-	15	-	-	15	-	V
<b>Life Ratings<sup>(1)</sup></b>												
Surge Life	500A (10/1000 $\mu$ s)	-	1000	-	-	1000	-	-	1000	-	-	shots
Max Current Surge	20kA (8/20 $\mu$ s)	-	5	-	-	5	-	-	5	-	-	shots
AC Current	10x 1sec @ 60Hz	-	-	-	20	-	-	20	-	-	20	A
AC Follow-on Current	1/2 cycle @ 60Hz	-	-	-	20	-	-	20	-	-	20	A pk
DC Holdover Voltage	per REA PE-80, 0.2A	-	-	90	-	-	150	-	-	150	-	V

PARAMETER	CONDITIONS	SYMBOL	CG2-300			CG2-350			CG2-470			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>												
DC Breakdown	500V/s	$V_{BD}$	240	300	360	280	350	420	376	470	564	V
Impulse Breakdown	100V/ $\mu$ s	$V_{BD}$	-	-	700	-	-	750	-	-	850	V
Insulation Resistance	100V	$IR_{DC}$	$10^{10}$	-	-	$10^{10}$	-	-	$10^{10}$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	-	-	1	pF
Arc Voltage	I=5A min	$V_{ARC}$	-	15	-	-	15	-	-	15	-	V
<b>Life Ratings<sup>(1)</sup></b>												
Surge Life	500A (10/1000 $\mu$ s)	-	1000	-	-	1000	-	-	1000	-	-	shots
Max Current Surge	20kA (8/20 $\mu$ s)	-	5	-	-	5	-	-	5	-	-	shots
AC Current	10x 1sec @ 60Hz	-	-	-	20	-	-	20	-	-	20	A
AC Follow-on Current	1/2 cycle @ 60Hz	-	-	-	20	-	-	20	-	-	20	A pk
DC Holdover Voltage	per REA PE-80, 0.2A	-	-	150	-	-	150	-	-	150	-	V

PARAMETER	CONDITIONS	SYMBOL	CG2-600			CG2-800			CG2-1000			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>												
DC Breakdown	500V/s	$V_{BD}$	480	600	720	640	800	960	800	1000	1200	V
Impulse Breakdown	100V/ $\mu$ s	$V_{BD}$	-	-	1000	-	-	1200	-	-	1500	V
Insulation Resistance	100V	$IR_{DC}$	$10^{10}$	-	-	$10^{10}$	-	-	$10^{10}$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	-	-	1	pF
Arc Voltage	I=5A min	$V_{ARC}$	-	15	-	-	15	-	-	15	-	V
<b>Life Ratings<sup>(1)</sup></b>												
Surge Life	500A (10/1000 $\mu$ s)	-	1000	-	-	1000	-	-	1000	-	-	shots
Max Current Surge	10kA (8/20 $\mu$ s)	-	10	-	-	10	-	-	10	-	-	shots
AC Current	10x 1sec @ 60Hz	-	-	-	20	-	-	20	-	-	20	A
AC Follow-on Current	1/2 cycle @ 60Hz	-	-	-	20	-	-	20	-	-	20	A pk
DC Holdover Voltage	per REA PE-80, 0.2A	-	-	150	-	-	150	-	-	150	-	V

<sup>(1)</sup>End-of-Life limits are:

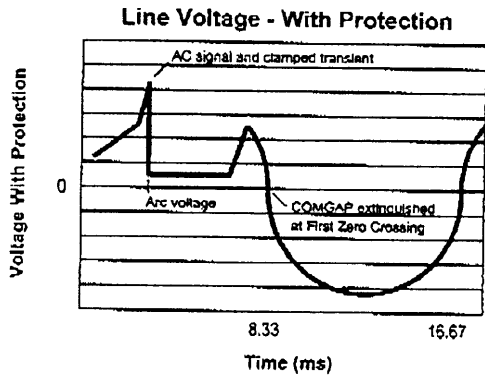
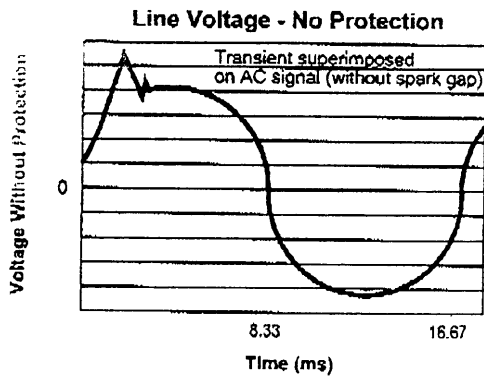
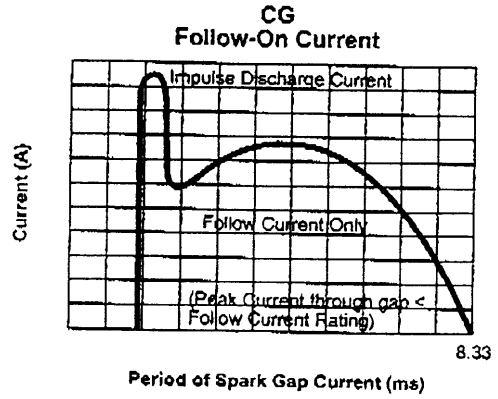
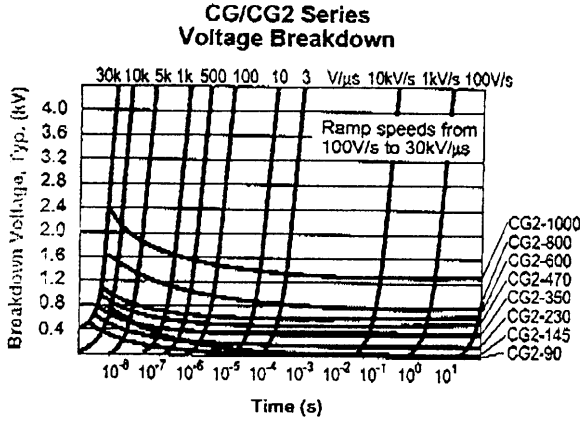
DC: 50% of minimum initial DC breakdown voltage limit to 150% of maximum initial DC breakdown voltage limit

Impulse: less than 150% of initial Impulse breakdown voltage limit.

# TWO ELECTRODE SURGE ARRESTERS

## CG/CG2 Series

### PERFORMANCE CHARACTERISTICS



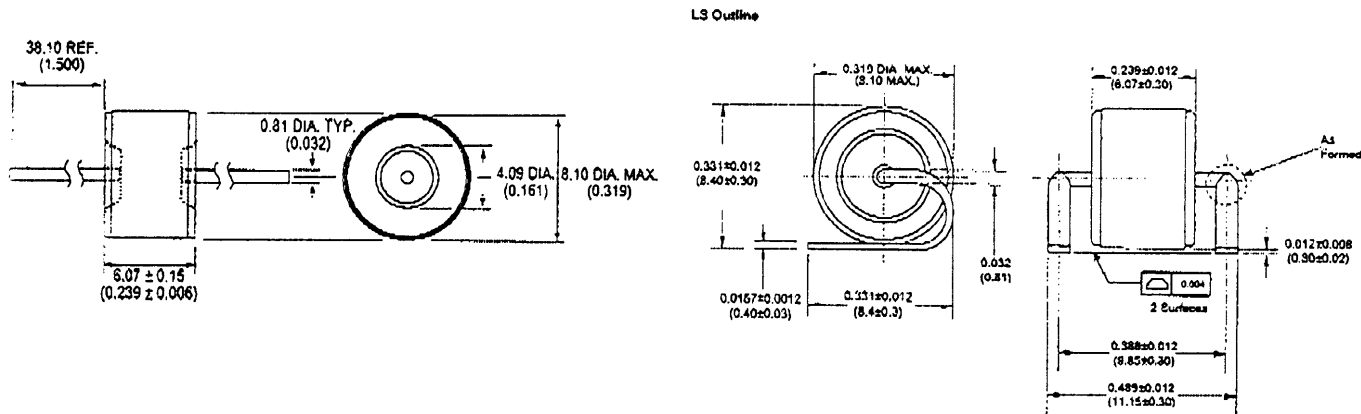
# TWO ELECTRODE SURGE ARRESTERS

## CG/CG2 Series

### MECHANICAL DIMENSIONS

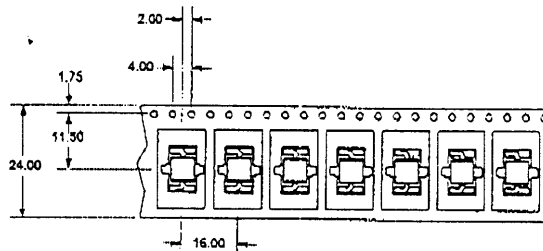
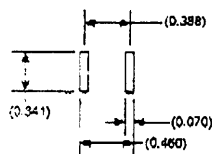
Other lead forms are available upon request.  
Contact ClareREMtech for more information.

**DIMENSIONS**  
mm  
(inches)



LS Recommended Land Pattern

LS Tape & Reel Packaging



Tape & Reel packaging is available on request. See ordering information below for part number structure.

### ORDERING INFORMATION

CG/CG2's with other breakdown voltages in the 75-1000 V range are available upon request. A complete part number is represented by the digits below. For example, CG75 is a non-leaded 75V device, CG2-230L is a leaded 230V device, and CG2-800LTR is a leaded 800V device on tape-and-reel per EIA standard RS-296-D.

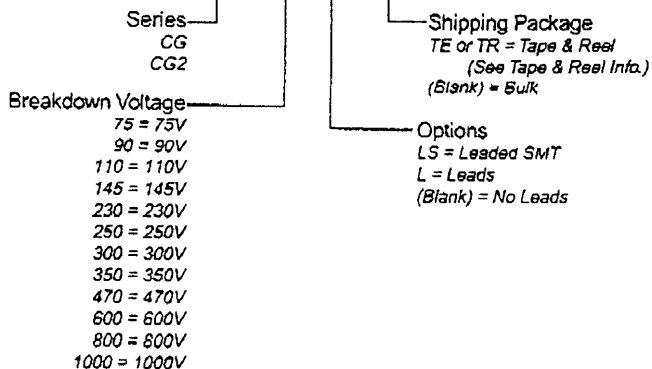
#### Tape & Reel Information

CGXXXLTR - Tape & Reel per EIA RS-296-D.  
Quantity = 1,000/Reel

CGXXXLTE - Tape & Reel per IEC286-1.  
Quantity = 1,000/Reel

CGXXXLSTR - See figure above for tape & reel information. Quantity = 1,000/Reel

CG XXX XX XX for 75, 90, 110V  
CG2 XXX XX XX for 145V & up



# TWO ELECTRODE NON-RADIOACTIVE SURGE ARRESTERS

## CG/CG2 SN Series



### DESCRIPTION

ClareREMtech's two electrode non-radioactive CG/CG2 SN Comgaps are designed for use in surge protection applications for which the radioactive isotope used in the standard CG/CG2 Series (75-470V) is not desired. The gas-filled, rugged ceramic-metal construction of Comgaps makes them well suited to adverse environments. Comgaps function as switches which dissipate a minimum amount of energy and therefore handle currents that far surpass other types of transient voltage protection.

### FEATURES

- Small size
- Rugged ceramic-metal construction
- Non-radioactive
- Low capacitance (<1pF)
- Available with or without leads
- Available in tape-and-reel packaging

### APPLICATIONS

- Communication lines
- CATV equipment
- Test equipment
- Power supplies
- Medical electronics
- Instrumentation circuits

### APPROVALS

- Meets REA PE-80
- Designed to meet CCITT-K12

### RATINGS (@ 25° C)

Parameter	Min	Typ	Max	Units
DC Breakdown Voltage	72	90	108	V
	184	230	276	V
	200	250	300	V
	240	300	360	V
	280	350	420	V
	376	470	564	V
Insulation Resistance	10 <sup>9</sup>	-	-	Ω
Capacitance	-	-	1	pF
Operational Temp	-40	-	+125	°C

(See detailed specifications for more information.)

# TWO ELECTRODE NON-RADIOACTIVE SURGE ARRESTERS

## CG/CG2 SN Series

### SPECIFICATIONS

All characteristics at 25°C

PARAMETER	CONDITIONS	SYMBOL	CG90SN CG90LSN			CG2-230SN CG2-230LSN			CG2-250SN CG2-250LSN			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>												
DC Breakdown	500V/s	$V_{BD}$	72	90	108	184	230	276	200	250	300	V
Impulse Breakdown	100V/ $\mu$ s	$V_{BD}$	-	-	500	-	-	600	-	-	600	V
Insulation Resistance	100V	IR	$10^9$	-	-	$10^9$	-	-	$10^9$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	-	-	1	pF
Arc Voltage	1=5A min	$V_{ARC}$	-	10	-	-	10	-	-	10	-	V
<b>Life Ratings<sup>(1)</sup></b>												
Surge Life	500A (10/1000 $\mu$ s)	-	400	-	-	400	-	-	400	-	-	shots
Max Current Surge	10kA (8/20 $\mu$ s)	-	10	-	-	10	-	-	10	-	-	shots
AC Current	10x 1sec @ 60Hz	-	-	-	20	-	-	20	-	-	20	A
AC Follow-on Current	1/2 cycle @ 60Hz	-	-	-	N/A	-	-	20	-	-	20	A pk
DC Holdover Voltage	per REA PE-80, 0.2A	-	-	65	-	-	150	-	-	150	-	V

PARAMETER	CONDITIONS	SYMBOL	CG2-300SN CG2-300LSN			CG2-350SN CG2-350LSN			CG2-470SN CG2-470LSN			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>												
DC Breakdown	500V/s	$V_{BD}$	240	300	360	280	350	420	376	470	564	V
Impulse Breakdown	100V/ $\mu$ s	$V_{BD}$	-	-	700	-	-	750	-	-	850	V
Insulation Resistance	100V	IR	$10^9$	-	-	$10^9$	-	-	$10^9$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	-	-	1	pF
Arc Voltage	1=5A min	$V_{ARC}$	-	10	-	-	10	-	-	10	-	V
<b>Life Ratings<sup>(1)</sup></b>												
Surge Life	500A (10/1000 $\mu$ s)	-	400	-	-	400	-	-	400	-	-	shots
Max Current Surge	10kA (8/20 $\mu$ s)	-	10	-	-	10	-	-	10	-	-	shots
AC Current	10x 1sec @ 60Hz	-	-	-	20	-	-	20	-	-	20	A
AC Follow-on Current	1/2 cycle @ 60Hz	-	-	-	20	-	-	20	-	-	20	A pk
DC Holdover Voltage	per REA PE-80, 0.2A	-	-	150	-	-	150	-	-	150	-	V

<sup>(1)</sup>End-of-life limits are:

DC: 50% of minimum initial DC breakdown voltage limit to 150% of maximum initial DC breakdown voltage limit.

Impulse: less than 150% of initial Impulse breakdown voltage limit.

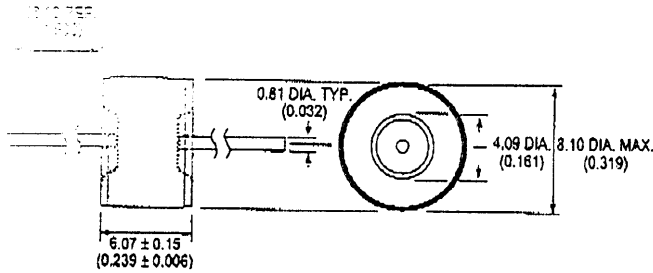
# CG/CG2 ELECTRODE NON-RADIOACTIVE SURGE ARRESTERS

## CG/CG2 SN Series

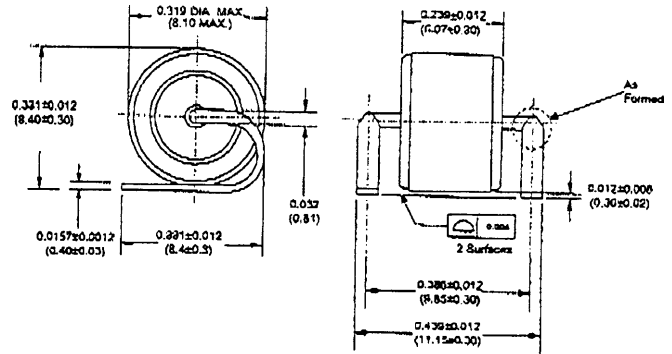
### MECHANICAL DIMENSIONS

Other lead forms are available upon request.  
Contact ClareREMtech for more information.

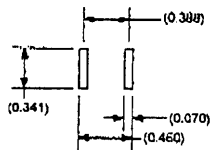
**DIMENSIONS**  
mm  
(inches)



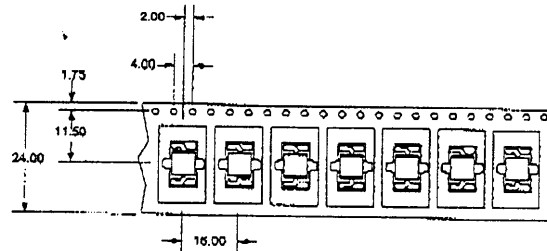
LS Outline



LS Recommended Land Pattern



LS Tape & Reel Packaging



Tape & Reel packaging is available on request. See ordering information below for part number structure.

### ORDERING INFORMATION

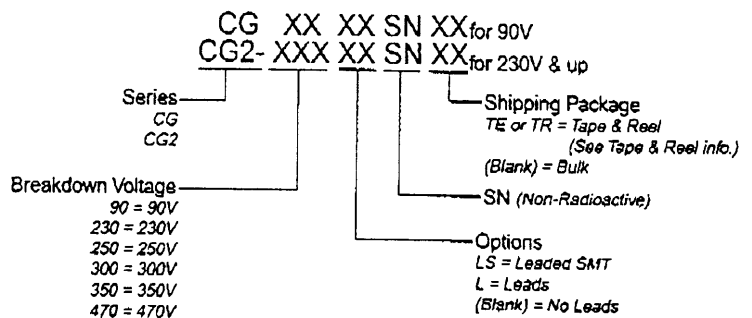
CG/CG2 SN's with other breakdown voltages in the 90-470 V range are available upon request. A complete part number is represented by the digits below. For example, CG2-230SN is a non-leaded 230V device, CG2-470LSN is a leaded 470V device, and CG90LSNTR is a leaded 90V device on tape-and-reel per EIA standard RS-296-D.

#### Tape & Reel Information

CGXXXLSNTR - Tape & Reel per EIA RS-296-D.  
Quantity = 1,000/Reel

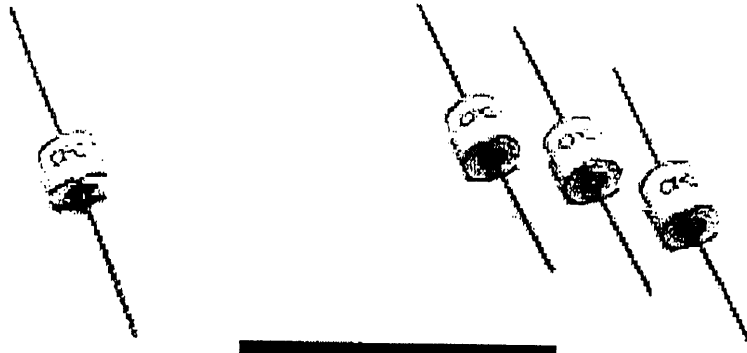
CGXXXLSNTE - Tape & Reel per IEC286-1.  
Quantity = 1,000/Reel

CGXXXLSSNTR - See figure above for tape & reel information. Quantity = 1,000/Reel



# TWO ELECTRODE HIGH VOLTAGE SURGE ARRESTERS

## CG3 Series



### DESCRIPTION

ClareREMtech's two electrode high voltage CG3 Comgaps (1.0 - 8.5 kV) are designed for surge protection in applications for which bias voltages or signal levels of several hundred volts are normally present. Comgaps function as switches which dissipate a minimum amount of energy and therefore handle currents that far surpass other types of transient voltage protection.

### FEATURES

- Small size
- Rugged ceramic-metal construction
- Non-radioactive
- Low capacitance (<1pF)
- Available in tape-and-reel packaging
- Available with or without leads

### APPLICATIONS

- CRT terminal
- CATV equipment
- Antennas
- Power supplies
- Medical electronics

### APPROVALS

- UL Recognized: File Number E111526
- UL Recognized: File Number E145934 (CG3XUHTZ only)
- CSA Approved: File Number LR89617

### RATINGS (@ 25° C)

Parameter	Min	Typ	Max	Unit
DC Breakdown Voltage	800	1000	1200	V
	1200	1500	1800	V
	1600	2000	2400	V
	2000	2500	3000	V
	2400	3000	3600	V
	3200	4000	4800	V
	4000	5000	6000	V
	6000	7500	9000	V
	6800	8500	10200	V
Insulation Resistance	10 <sup>10</sup>	-	-	Ω
Capacitance	-	-	1	pF
Operational Temperature	-40	-	+125	°C

(See detailed specifications for more information.)



# TWO ELECTRODE HIGH VOLTAGE SURGE ARRESTERS

## CG3 Series

### SPECIFICATIONS

All characteristics at 25°C

PARAMETER	CONDITIONS	SYMBOL	CG3-1.0 CG3-1.0L			CG3-1.5 CG3-1.5L			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>									
DC Breakdown	500V/s	$V_{BD}$	800	1000	1200	1200	1500	1800	V
Impulse Breakdown	100V/ $\mu$ s	$V_{bd}$	-	-	1500	-	-	2200	V
Insulation Resistance	100V	IR	$10^{10}$	-	-	$10^{10}$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	pF
Arc Voltage	I=5A min	$V_{ARC}$	-	10	-	-	10	-	V
Mechanical Outline		-	-	A	-	-	A	-	-
<b>Life Ratings<sup>(1)</sup></b>									
Surge Life	.002mF, 100 $\Omega$	-	500	-	-	500	-	-	shots
Max Current Surge	10kA (8/20 $\mu$ s)	-	5	-	-	5	-	-	shots
AC Follow-on Current	1/2 cycle @ 60Hz	-	-	-	300	-	-	300	A pk

PARAMETER	CONDITIONS	SYMBOL	CG3-2.0 CG3-2.0L			CG3-2.5 CG3-2.5L			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>									
DC Breakdown	500V/s	$V_{BD}$	1600	2000	2400	2000	2500	3000	V
Impulse Breakdown	100V/ $\mu$ s	$V_{bd}$	-	-	3000	-	-	3750	V
Insulation Resistance	100V	IR	$10^{10}$	-	-	$10^{10}$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	pF
Arc Voltage	I=5A min	$V_{ARC}$	-	10	-	-	10	-	V
Mechanical Outline		-	-	A	-	-	A	-	-
<b>Life Ratings<sup>(1)</sup></b>									
Surge Life	.002mF, 100 $\Omega$	-	500	-	-	500	-	-	shots
Max Current Surge	10kA (8/20 $\mu$ s)	-	5	-	-	5	-	-	shots
AC Follow-on Current	1/2 cycle @ 60Hz	-	-	-	300	-	-	300	A pk

PARAMETER	CONDITIONS	SYMBOL	CG3-3.0 CG3-3.0L			CG3-4.0 CG3-4.0L			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>									
DC Breakdown	500V/s	$V_{BD}$	2400	3000	3600	3200	4000	4800	V
Impulse Breakdown	100V/ $\mu$ s	$V_{bd}$	-	-	4500	-	-	6000	V
Insulation Resistance	100V	IR	$10^{10}$	-	-	$10^{10}$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	pF
Arc Voltage	I=5A min	$V_{ARC}$	-	10	-	-	10	-	V
Mechanical Outline		-	-	B	-	-	B	-	-
<b>Life Ratings<sup>(1)</sup></b>									
Surge Life	.002mF, 100W	-	500	-	-	500	-	-	shots
Max Current Surge	10kA (8/20 $\mu$ s)	-	5	-	-	5	-	-	shots
AC Follow-on Current	1/2 cycle @ 60Hz	-	-	-	300	-	-	300	A pk

<sup>(1)</sup>End-of-life limits are:

DC: 50% of minimum initial DC breakdown voltage limit to 150% of maximum initial DC breakdown voltage limit.

Impulse: less than 150% of initial Impulse breakdown voltage limit.

# TWO ELECTRODE HIGH VOLTAGE SURGE ARRESTERS

## CG3 Series

### SPECIFICATIONS

All characteristics at 25°C

PARAMETER	CONDITIONS	SYMBOL	CG3-5.0 CG3-5.0L			CG3-7.5 CG3-7.5L			CG3-8.5 CG3-8.5L			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>												
DC Breakdown	500V/s	$V_{BD}$	4000	5000	6000	6000	7500	9000	6800	8500	10200	V
Impulse Breakdown	100V/ $\mu$ s	$V_{BD}$	-	-	7500	-	-	10000	-	-	13500	V
Insulation Resistance	100V	IR	$10^{10}$	-	-	$10^{10}$	-	-	$10^{10}$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	-	-	1	pF
Arc Voltage	I=5A min	$V_{ARC}$	-	10	-	-	10	-	-	10	-	V
Mechanical Outline			-	B	-	-	B	-	-	B	-	-
<b>Life Ratings<sup>(1)</sup></b>												
Surge Life	.002mF, 100 $\Omega$	-	500	-	-	500	-	-	500	-	-	shots
Max Current Surge	10kA (8/20 $\mu$ s)	-	5	-	-	5	-	-	5	-	-	shots
AO Follow-on Current	$\frac{1}{2}$ cycle @ 60Hz	-	-	-	300	-	-	300	-	-	300	A pk

<sup>(1)</sup>End-of-life limits are:

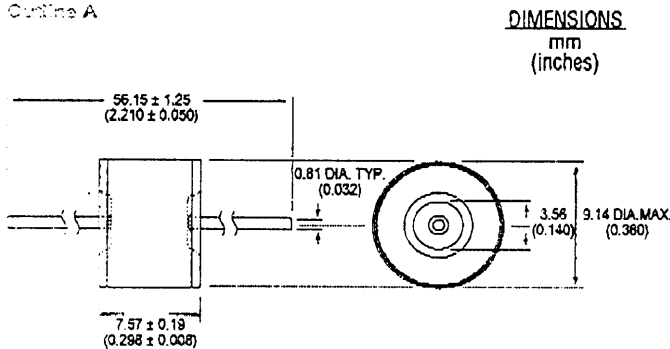
DC: 50% of minimum initial DC breakdown voltage limit to 150% of maximum initial DC breakdown voltage limit.

Impulse: less than 150% of initial impulse breakdown voltage limit.

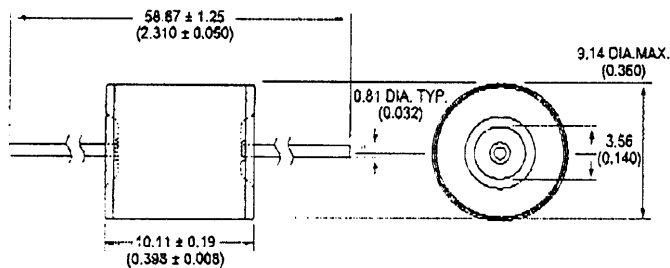
### MECHANICAL DIMENSIONS

Other lead forms are available upon request.  
Contact ClareREMtech for more information.

Outline A

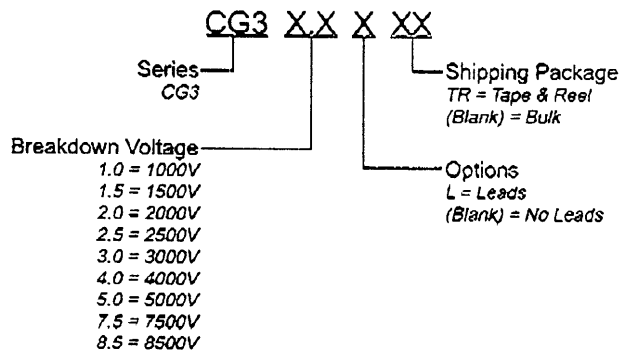


Outline B



### ORDERING INFORMATION

CG3's with other breakdown voltages in the 1.0-8.5kV range are available upon request. A complete part number is represented by the digits below. For example, CG3-1.5 is a non-leaded 1500V device, CG3-5.0L is a leaded 5000V device, and CG3-7.5LTR is a leaded 7500V device on tape-and-reel per EIA standard RS-296-D.



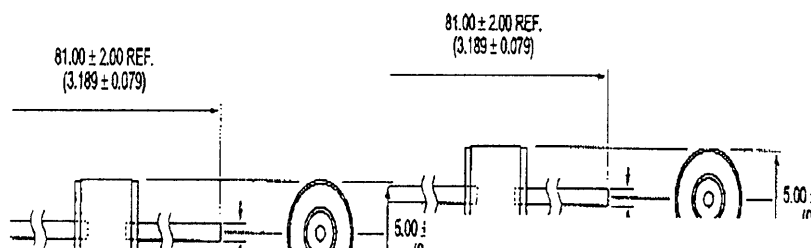
### Tape & Reel Information

CG3XXLTR - Tape & Reel per EIA RS-296-D.  
Quantity = 1,000/Reel

CG3XXLTE - Tape & Reel per IEC286-1.  
Quantity = 1,000/Reel

# TWO ELECTRODE MINI SURGE ARRESTERS

## CG5 Series



### DESCRIPTION

ClareREMtech's two electrode mini CG5 Comgaps are gas filled, non-radioactive surge protectors. These devices are physically smaller than Clare's standard CG/CG2 series reducing the space required to provide high performance circuit protection. The CG5 series can be supplied with or without leads. These components are used in a variety of different applications, including telecom and CATV communication lines. The small CG5 gas gaps function as switches which dissipate a minimum amount of energy and therefore handle currents that far surpass other types of transient voltage protection.

### FEATURES

- Smallest CG device
- Non-radioactive
- Rugged ceramic-metal construction
- Low capacitance (<1pF)
- Available with or without leads
- Available in tape-and-reel packaging

### APPLICATIONS

- Telecom lines
- CATV equipment
- Test equipment
- Data lines
- Instrumentation circuits

### RATINGS (@ 25° C)

Parameter	Min	Typ	Max	Units
DC Breakdown Voltage	72	90	113	V
	184	230	276	V
	280	350	420	V
Insulation Resistance	10 <sup>10</sup>	-	-	Ω
Capacitance	-	-	1	pF
Operational Temperature	-40	-	+125	°C

(See detailed specifications for more information.)



# TWO ELECTRODE MINI SURGE ARRESTERS

## CG5 Series

### SPECIFICATIONS

All characteristics at 25°C

PARAMETERS	CONDITIONS	SYMBOL	CG5-90			CG5-230			CG5-350			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>												
DC Breakdown	500V/s	$V_{BO}$	72	90	113	184	230	276	280	350	420	V
Impulse Breakdown	100V/ $\mu$ s	$V_{BI}$	-	-	500	-	-	500	-	-	600	V
	1kV/ $\mu$ s	$V_{BI}$	-	-	700	-	-	700	-	-	800	V
Insulation Resistance	50V	$I_{IR}$	$10^{10}$	-	-	$10^{10}$	-	-	$10^{10}$	-	-	$\Omega$
Capacitance	1MHz	C	-	-	1	-	-	1	-	-	1	pF
Arc Voltage	I=5A min	$V_{ARC}$	-	25	-	-	25	-	-	25	-	V
<b>Life Ratings<sup>(1)</sup></b>												
Surge Life	100A (10/1000 $\mu$ s)	-	300	-	-	300	-	-	300	-	-	shots
Max Current Surge	5kA (8/20 $\mu$ s)	-	10	-	-	10	-	-	10	-	-	shots
AC Current	10x 1sec @ 60Hz	-	-	-	5	-	-	5	-	-	5	A

<sup>(1)</sup> End-of-Life limits are:

DC: 50% of minimum initial DC Breakdown Voltage limit to 150% of maximum initial DC Breakdown Voltage limit.

Impulse: less than 150% of initial impulse Breakdown Voltage limit.

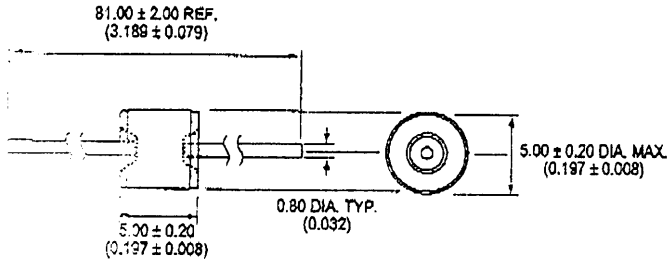
# HEAVY DUTY SURGE ARRESTERS

## CG5 Series

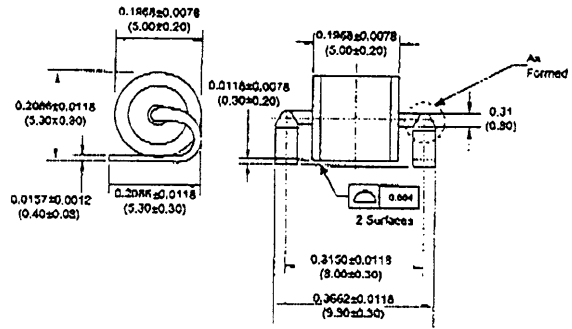
### MECHANICAL DIMENSIONS

Other lead forms are available upon request.  
Contact ClareREMtech for more information.

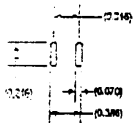
**DIMENSIONS**  
mm  
(inches)



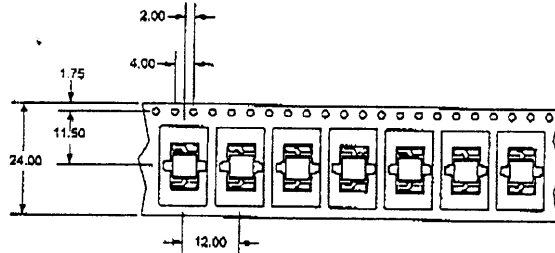
LS Outline



LS Tape and Reel Lead Outline



LS Tape & Reel Packaging



Tape & Reel packaging is available on request. See ordering information below for part number structure.

### ORDERING INFORMATION

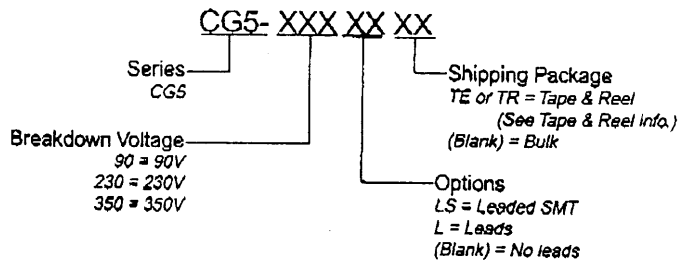
A complete part number is represented by the digits below.  
For example, CG5-90 is a non-leaded 90V device, CG5-230L is a leaded 230V device, and CG5-350LSTR is a leaded 350V device on tape-and-reel per EIA standard RS-296-D.

#### Tape & Reel Information

CG5XXXLSTR - Tape & Reel per EIA RS-296-D.  
Quantity = 1,000/Reel

CG5XXXLSTR - Tape & Reel per IEC286-1.  
Quantity = 1,000/Reel

CG5XXXLSTR - See figure above for tape & reel information. Quantity = 1,500/Reel



USA 1-877-4REMTECH Europe 32-11-300868 Japan 81-3-3667-3302 Ext. 2419  
Hong Kong/China/Korea 852-2880-6773 Taiwan 886-2-2726-2177 Singapore/Far East 65-296-3388