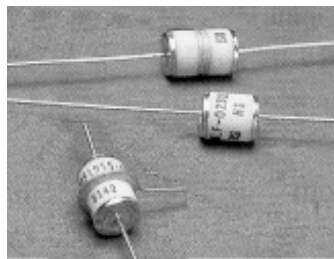
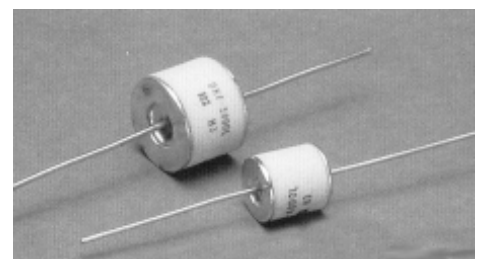


FROM TOP: MLH, MCF, MCH



FROM TOP: MLH-2S, MLF, MLT



FROM TOP: DKF, DCF

GAS TUBE ORDERING INFORMATION

Any of the five families of standard gas tubes specified in this literature may be purchased through the Reynolds Sales Department by using the following part number system.

Each part number is described by an eight-character system. The first three characters in the part number are alpha characters describing the family size. The following four numeric number characters designate the desired DC breakdown, if leads are desired, an alpha iLî is added to the completed part number.

Rated DC breakdowns are +/- 15%.

FAMILY	DESIGNATOR
MICRO-ARC	MCF = FULL; MCH = HALF; MCQ = QUARTER
MILLI-ARC	MLF FULL; MLH HALF
MILLI-TRIARC	MLT
DECI-ARC	DCF
DEKA-ARC	DKF

Example: 230 volt mull-arc, full size P/N MLF-O230, P/N (with leads) MLF-O230L

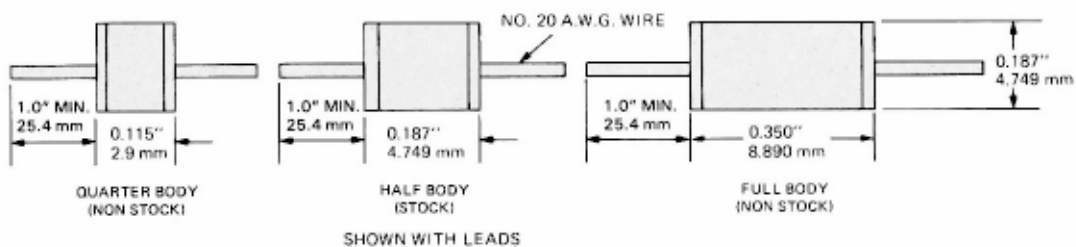
RADIOACTIVE BACKFILL GAS

All standard except 90 volt versions, Reynolds gas tubes contain minute amounts of Tritium Backfill Gas. (Maximum amount 10 microcuries). Each gas tube is identified with international radiation symbol H

MICRO-ARC SERIES

The Micro-Arc gas tube series are designed for electrical transient protection and energy release in applications where miniaturized packaging is necessary and small transient currents are anticipated. They may also be used where a large one time energy release is required, for example, in the initiation of explosive detonations. They offer a high insulation resistance of greater than 10 ohms and capacitance of less than 1pF. Surge capability is 1000 amperes (8 x 20 usec waveshape). The gas tubes are available in a DC breakdown voltage range from 90 to 2000 volts except for the half and quarter sizes which are limited to an upper limit of 1000 and 500 volts respectively. Note: Voltages are available thru 1650V on MCQ and thru 2000V on MCH series provided adequate over-potting is utilized by the customer. Units normally stocked are as follows. Other breakdown voltages are available on request.

Part Number	DC Breakdown		Impulse Breakdown
	(@ 100V/Sec)		(@ 100 V/Sec)
	V Range		
MCH-0230	196	264	<1100
MCH-0350	298	402	<1200
MCH-0500	425	575	<1300
MCH-0800	680	920	<1800
MCH-1000	850	1150	<2100

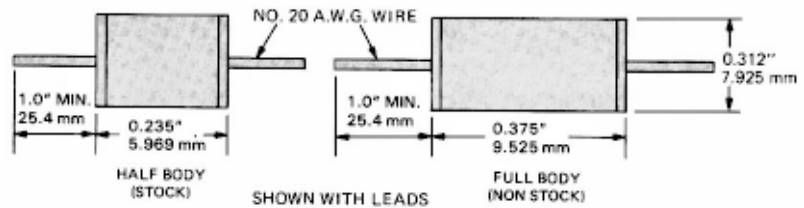


MILLI-ARC SERIES

The convenient physical size of the Milli-Arc series of gas tubes and their 10,000 ampere (8 x 20 usec waveshape) discharge capability make this series the most suitable for general purpose transient protection. They also may be used for energy release in exploding bridgewire applications and in various vacuum tube grid circuits for tube arc protection. Insulation resistance is greater than 10⁹ohms and capacitance is less than 2 pF. Milli-Arc tubes are available in breakdown voltages from 90 to 4500 volts (MLH), 8500 volts (MLF). Units normally stocked are as follows. Other breakdown voltages available on request.

Part Number	DC Breakdown	Impulse Breakdown	
	(@100V/sec) (Range)	(@10 kV/usec)	

MLH-0090	72	108	<1000
MLH-0230	196	264	<1100
MLH-0350	298	402	<1200
MLH-0500	425	575	<1300
MLH-0800	680	920	<1800
MLH-1000	850	1150	<2100



MILLI-TRIARC SERIES

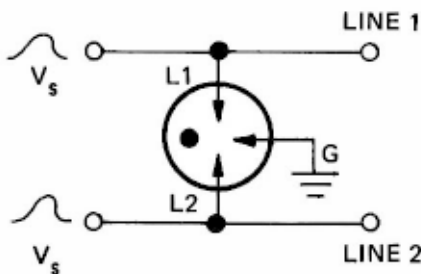
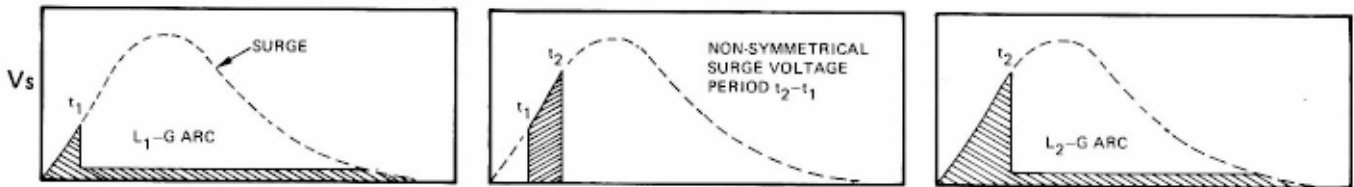
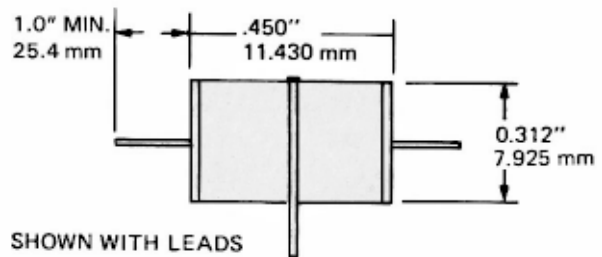
Milli-Triarc gas tubes are designed for electrical transient protection of balanced pair communications lines. Their three-electrode design provides a discharge path from each line to ground in addition to a line-to-line path for metallic surges. They may also be used for triggered applications where an adequate trigger pulse is available.

When installed on balanced pair lines, where symmetrical surge voltages are anticipated on each line pair, this three electrode series provides for a rapid sympathetic breakdown of the opposite line electrode to ground following the initial line to ground breakdown. The delay, t₂-t₁ shown in the diagram below, is considerably shorter with this series of gas tubes than that found where two separate two electrode gas tubes are used. The milli-triarc type tube also provides line-to-line surge protection. These tubes are capable of a 10,000 ampere (8 x 20 usec waveshape) surge. Insulation resistance is greater than 10⁹ ohms. Capacitance is less than 2 pF.

Normally, stocked units are as follows. Other breakdown voltages to 2000 volts are available on request.

Part Number	DC Breakdown	Impulse Breakdown	
	(@100V/sec) (Range)	(@10kV/usec)	

MLT-0090	72	108	<1000
MLT-0230	196	264	<1100
MLT-0350	298	402	<1200
MLT-0500	425	575	<1300

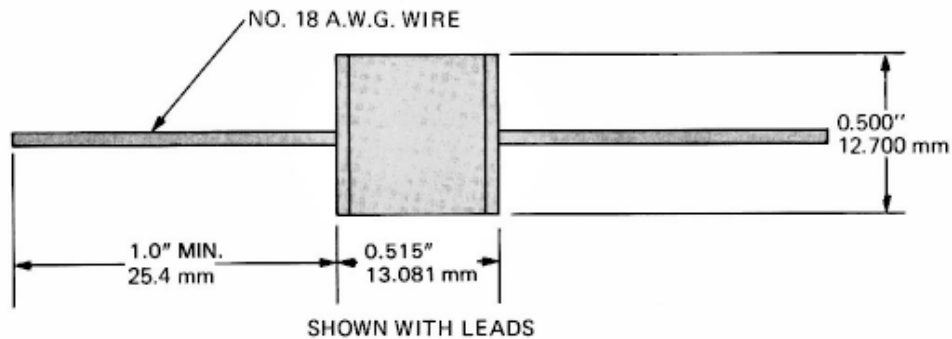


DECI-ARC SERIES

The Deci-Arc tubes are for protection in circuits where high energy transients are anticipated and where size 18 AWG or larger wire sizes are used. They have a 20,000 ampere (8 x 20 usec waveshape) capability and may be used in combination with suitable series resistance for protection on both AC and DC power circuits. Capacitance of these tubes is less than 10pF and initial insulation resistance is greater than 10⁹ohms.

The gas tubes are available in DC breakdown voltage ranges from 230 to 10,000 volts. Units normally stocked are as follows. Other breakdown voltages available on request.

Part Number	DC Breakdown	Impulse Breakdown	
	(@100V/Sec) (Range)	(@10kV/uSec)	(@10kV/uSec)
DCF-0090	72	108	<1100
DCF-0230	186	264	<1200
DCF-0350	298	402	<1300
DCF-0500	425	575	<1800
DCF-0800	680	920	<2100
DCF-1000	850	1150	<2200



DEKA-ARC SERIES

The Deka-Arc series of gas tubes is designed for heavy duty electrical transient protection. Their 40,000 ampere (8 x 20 usec waveshape) capability makes them suitable for many direct lightning stroke protection applications and for power line protection when used with appropriate series resistances. They may also be used in circuits where long life is desired under repetitive pulse conditions. Capacitance of these tubes is less than 10 pF and initial insulation resistance is greater than 10⁹ ohms. Tubes are available in DC breakdown voltage ranges from 230 to 10,000 volts. Units normally stocked are as follows, other voltages available on request.

Part Number	DC Breakdown	Impulse Breakdown	
	(@100V/Sec) (Range)	(@10kV/uSec)	(@10kV/uSec)
DKF-0230	196	264	<1200
DKF-0350	298	402	<1500
DKF-0500	425	575	<1700
DKF-0800	680	920	<2000
DKF-1000	850	1150	<2300

