

FIG 1. RECOMMENDED BREAKOVER VOLTAGE TEST CIRCUIT
(DISCHARGE CURRENT = 10-20MA, SENSITIVITY OF
PEAK VOLTAGE DETECT = 10-30MA)



SWITCHING GAS DISCHARGE TUBES LT SERIES GAS PLASMA VOLTAGE DEPENDENT SWITCHES

DEVICE RATINGS AND SPECIFICATIONS

Cat. No.	⁽¹⁾ V _{BO} (V)	V _S (V)	V _T @ 5A (V)	⁽²⁾ I _{DRM} (A)	⁽³⁾ I _{BO} (mA)	⁽⁴⁾ C _O (pF)	V _{BO} to V _T (nS)	Net Price
LT230A	195-265	184-276	15	1.0	50	2.0	25	\$6.75
LT800A	680-920	640-960	15	1.0	50	2.0	25	6.75

NOTES: ⁽¹⁾ Measured on recommended test circuit (fig. 1). ⁽²⁾ Measured @ 100 volts DC. ⁽³⁾ Current required for transition to on-state. ⁽⁴⁾ Measured @ 1 MHz, zero volt bias.

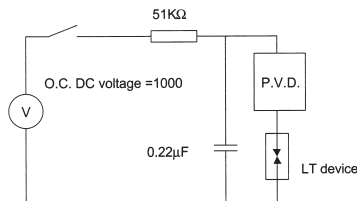
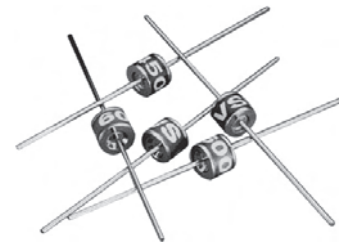


FIG 1. RECOMMENDED BREAKOVER VOLTAGE TEST CIRCUIT
(DISCHARGE CURRENT = 10-20MA; SENSITIVITY OF
PEAK VOLTAGE DETECT = 10-30MA)



SWITCHING GAS DISCHARGE TUBES VS SERIES GAS PLASMA VOLTAGE DEPENDENT SWITCHES

DEVICE RATINGS AND SPECIFICATIONS

Cat. No.	V _{BO} ⁽¹⁾ (V)	V _T @ 5A (V)	I _{DRM} ⁽²⁾ (A)	I _{BO} ⁽³⁾ (mA)	C _O ⁽⁴⁾ (pF)	V _{BO} to V _T (nS)	Net Price
VS230A	200-255	15	1.0	50	2.0	25	\$7.42
VS450A	350-550	15	1.0	50	2.0	25	7.42
VS600A	400-750	15	1.0	50	2.0	25	7.42

NOTES: ⁽¹⁾ Measured on recommended test circuit (fig. 1). ⁽²⁾ Measured @ 300 volts DC. ⁽³⁾ Current required for transition to on-state. ⁽⁴⁾ Measured @ 1 MHz, zero volt bias.



GAS DISCHARGE TUBES HIGH PERFORMANCE BATA RANGE GREENTUBE™ SL1002 SERIES GAS PLASMA ARRESTERS

LITTELFUSE 2 TERMINAL MINI ARRESTER SERIES TOTALLY NON-RADIOACTIVE, UL RECOGNIZED

Cat. No.	DC Voltage @ 100V/sec (V)	Max Dynamic Breakover Voltage @ 100V/μs (Vbr)	Max Dynamic Breakover Voltage @ 1 kV/μs (Vbr)	Max Repetitive Impulse Discharge Current ⁽²⁾ (kA)	Max Single Impulse Discharge Current ⁽⁵⁾ (A)	Max Single Impulse Discharge Current ⁽⁶⁾ (A)	Max Leakage Current ⁽³⁾ (nA)	Max Capacitance ⁽⁴⁾ (pF)	Holdover Voltage ⁽¹⁾ (V)	Nominal On-State Voltage @ 1A (V)	Net Price
SL1002A090SM	90	360	700	5	2	2	100	1.2	50	20	\$1.43
SL1002A230SM	230	400	500	5	2	2	100	1.2	135	20	1.43

NOTES: ⁽¹⁾ Test according to ITU-T Rec.K12. ⁽²⁾ 10 shots, 8/20μs wave form per IEC 61000-4-5. ⁽³⁾ Measured @ 100 volts. ⁽⁴⁾ Measured @ 1 MHz, zero volt bias. ⁽⁵⁾ Measured with 2/10μs wave form. ⁽⁶⁾ Measured with 10/350μs wave form



GAS DISCHARGE TUBES
HIGH PERFORMANCE BATA RANGE
GREENTUBE™ SL1021S SERIES GAS PLASMA ARRESTERS

LITTELFUSE 3 TERMINAL HEAVY DUTY ARRESTER SERIES TOTALLY NON-RADIOACTIVE, UL RECOGNIZED

Cat. No.	DC Voltage @ 100V/sec (V)	DC Breakover Voltage Min-Max (V)	Max Dynamic Breakover Voltage @ 100V/μs	Max Alternating Discharge Current ^{1,3} (A)	Max Alternating Discharge Current ⁵ (A)	Max Repetitive Impulse Discharge Current (kA)	Max Impulsive Discharge Current (kA)	Max Single Impulse Discharge Current 10/350μs ⁵ (kA)	Life Test Rating ²	Net Price
SL1021B230R	230	184-276	350	20	10	10	20	2.5	100 shots	\$3.20

NOTES: ⁽¹⁾Total current through centre (ground) electrode, both line electrodes pulsed simultaneously; half value through respective line terminal to ground. ⁽²⁾100 amps, 10/1000μs pulse. ⁽³⁾10 shots, AC Hz, 1 sec. duration. ⁽⁵⁾Either end (line) electrode to centre (ground) electrode.



GAS DISCHARGE TUBES
OMEGA RANGE
GREENTUBE™ SL1024B SERIES GAS PLASMA ARRESTERS

LITTELFUSE 3 TERMINAL ARRESTER SERIES TOTALLY NON-RADIOACTIVE, UL RECOGNIZED

Cat. No.	DC Voltage (V)	DC Breakover Voltage Min-Max @ 100V/sec (V)	Max Dynamic Breakover Voltage @ 100/μs (V)	Alternating Discharge Current ^{1,3} (A)	Alternating Discharge Current ^{5,3} (A)	Max Repetitive Impulse Discharge Current 8/20μs ^{1,4} (kA)	Max Single Impulse Discharge Current 8/20μs ¹ (kA)	Max Single Impulse Discharge Current 10/350μs ^{5,2} (kA)	Net Price
SL1024B090R	90	70-120	600	20	10	20	40	2.5	\$2.72
SL1024B230R	230	184-276	350	20	10	20	40	2.5	2.72

NOTES: ⁽¹⁾ Total current through centre (ground) electrode, both line electrodes pulsed simultaneously; half value through respective line terminal to ground. ⁽²⁾ 100 amps, 10/100μs pulse. ⁽³⁾ 10 shots, AC Hz, 1 sec. duration. ⁽⁴⁾ 10 shots, 8/20μs Waveform. ⁽⁵⁾ Either end (line) electrode to centre (ground) electrode.



GAS DISCHARGE TUBES
HIGH PERFORMANCE ALPHA RANGE
GREENTUBE™ SL1122A SERIES HYBRID GAS PLASMA ARRESTERS

LITTELFUSE 3 TERMINAL ARRESTER SERIES TOTALLY NON-RADIOACTIVE, UL BREAKER VOLTAGE

Part Number	DC Voltage (V)	Breakover Voltage ^{1,2,4} (V)	Max Dynamic Breakover Voltage @ 1kV/μs (Vbr)	Max Repetitive Impulse Discharge Current ^{4,7} (kA)	Max Repetitive Impulse Discharge Current ^{5,7} (kA)	Alternating Discharge Current ^{4,6} (A)	Insulation Resistance ⁸ (Ω)	Max Capacitance ⁹ (pF)	Holdover Voltage ³ (V)	Nominal On-State Voltage @ 1A (V)	Net Price
SL1122A090	90	70-120	150	5	10	5	1 × 10 ⁸ @ 50V	200	50	20	\$7.33
SL1122A230	230	184-276	350	5	10	5	1 × 10 ⁸ @ 150V	100	135	20	7.33

NOTES: ⁽¹⁾ Measured using a voltage rate of rise of 100V/s. ⁽²⁾ In ionized mode. ⁽³⁾ Tested according to ITC-T Rec. K. 12. ⁽⁴⁾ Either end electrode. ⁽⁵⁾ Total current through centre electrode, both line electrodes subject to simultaneous pulses. ⁽⁶⁾ 10 shots, AC 60Hz, 1 sec duration. ⁽⁷⁾ 10 shots, 8/20μs waveform. ⁽⁸⁾ Measured @ 100V. ⁽⁹⁾ Measured at MHz, line to ground