

Gas Discharge Tubes

3 Electrode Mini (3RM) and Standard (3R) Series

Part Numbering System | Specifications | Dimensions

Part Numbering System

WPGT - **3R** **200** **C**
① **②** **③** **④**

① World Products Gas Discharge Tubes

② Series Code

3RM = 3 Electrode Mini Series
3R = 3 Electrode Standard Series

③ DC Breakdown Voltage (Please reference specification to determine available voltage options for each series.)

75 = 75V - 3R Series Only	350 = 350V
90 = 90V	400 = 400V
145 = 145V	420 = 420V - 3RM Series Only
200 = 200V	470 = 470V
230 = 230V	550 = 550V - 3R Series Only
250 = 250V	600 = 600V
260 = 260V - 3R Series Only	
300 = 300V - 3R Series Only	

④ Lead Type

B = No Leads
CF= (1.0mm lead diameter) with Fail Safe – 3R Series Only
CF1= (0.8mm lead diameter) with Fail Safe
C = Radial Lead (1.0mm lead diameter) – 3R Series Only
C2 = Radial Lead (0.8 lead diameter) – 3R Series Only
C3 = Radial Lead with 3.8 ± 0.3mm lead pitch (0.8mm lead diameter) – 3RM Series Only
G = Axial Lead (1.0mm lead diameter) – 3R Series Only
G1 = Axial Lead (0.8mm lead diameter) – 3R Series Only
H = Radial lead with 4.4mm ± 0.3mm lead pitch (0.8mm lead diameter) – 3 RM series only

Specifications

3 Electrode Mini Series (3RM)

Base Part Number	DC Breakdown Voltage (V)	Maximum Impulse Breakdown Voltage (V)		Maximum Impulse Discharge Current (8/20 μ s) (KA)		Alternating Discharge Current (A)		Impulse Life (10/ 1000μ s) (400A)	DC Holdover Voltage (V)	Minimum Insulation Resistance (G?)	Maximum Capacitance (pf)
	100V/s	100V/μ s	1000V/μ s	1 time	10 times (5 times each polarity)	50Hz, 1 sec	50Hz, 1 sec	times	<150ms	*	1MHz
WPGT-3RM90	90 ± 20%	750	850	10	5	5	30	300	52	10	2
WPGT-3RM145	145 ± 20%	750	850	10	5	5	30	300	52	10	2
WPGT-3RM200	200 ± 20%	600	700	15	10	10	60	300	135	10	2
WPGT-3RM230	230 ± 20%	600	700	15	10	10	60	300	135	10	2
WPGT-3RM250	250 ± 20%	600	700	15	10	10	60	300	135	10	2
WPGT-3RM350	350 ± 20%	650	750	15	10	10	60	300	150	10	2
WPGT-3RM400	400 ± 20%	700	800	15	10	10	60	300	150	10	2
WPGT-3RM420	420 ± 20%	700	800	15	10	10	60	300	150	10	2
WPGT-3RM470	470 ± 20%	800	900	15	10	10	60	300	150	10	2
WPGT-3RM600	600 ± 20%	900	1000	10	5	5	30	300	150	10	2

UL497B Recognized, File #E135015

*DC Breakdown Voltage DC Measuring Voltage

90-145V	50V
200-400V	100V
420-600V	250V

3 Electrode Standard Series (3R)

Base Part Number	DC Breakdown Voltage (V)	Maximum Impulse Breakdown Voltage (V)		Maximum Impulse Discharge Current (8/20 μ s) (KA)		Alternating Discharge Current (A)		Impulse Life (10/ 1000μ s) (400A)	DC Holdover Voltage (V)	Minimum Insulation Resistance (G?)	Maximum Capacitance (pf)
	100V/s	100V/μ s	1000V/μ s	1 time	10 times (5 times each polarity)	50Hz, 1 sec	Single 9 cycles	times	<150ms	*	1MHz
WPGT-3R75	75 ± 20%	600	700	20	10	10	130	300	52	10	2
WPGT-3R90	90 ± 20%	600	700						52	10	2
WPGT-3R145	145 ± 20%	500	700						52	10	2
WPGT-3R200	200 ± 20%	500	700						80	10	2
WPGT-3R230	230 ± 20%	600	700						80	10	2
WPGT-3R250	250 ± 20%	600	700						80	10	2
WPGT-3R260	260 ± 20%	600	700						80	10	2
WPGT-3R300	300 ± 20%	700	900						150	10	2
WPGT-3R350	350 ± 20%	700	900						150	10	2
WPGT-3R400	400 ± 20%	800	1000						150	10	2
WPGT-3R470	470 ± 20%	800	1000						150	10	2
WPGT-3R550	550 ± 20%	1100	1400						150	10	2
WPGT-3R600	600 ± 20%	1200	1500						150	10	2

UL497B Recognized, File # E135015

*DC Breakdown Voltage DC Measuring Voltage

70-90V	50V
145V-400V	100V
470V-600V	250V

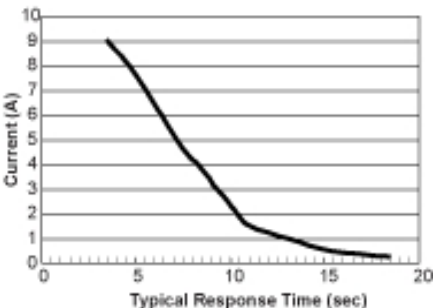
Dimensions

3 Electrode Mini Series (3RM)

Unit: mm

Item	Dimensions (mm)
D	6.0 +0.2, -0.5
T	8.5 ± 0.4
T1	11.5 +0.8, -0.5
L	7.0 ± 0.5
S	3.8 ± 0.3 or 4.4 ± 0.3
d	0.8 ± 0.05
L1	2.5 ± 0.5
R1	6.3 ± 0.3
R2	7.6 ± 0.4

Failsafe Current - Time Curve

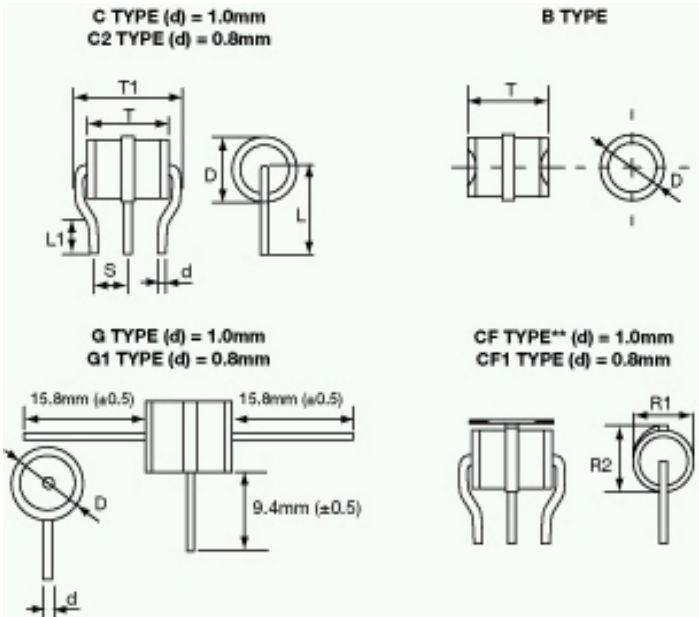
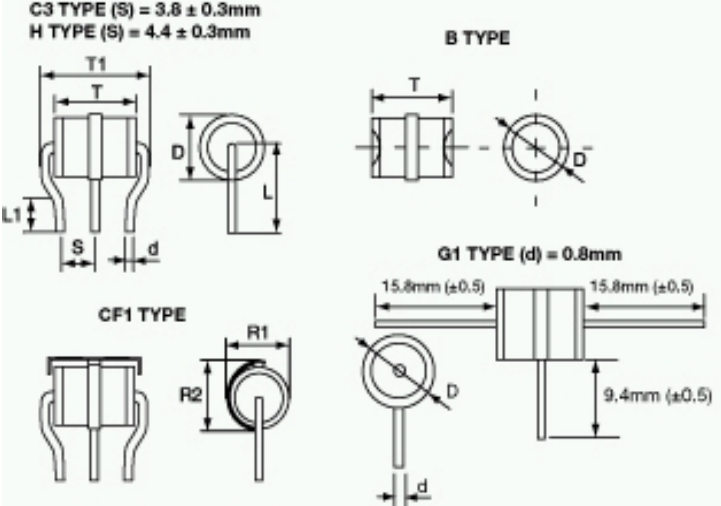
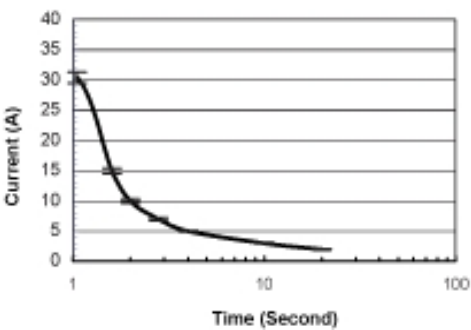


3 Electrode Standard Series (3R)

Unit: mm

Item	Dimensions (mm)
D	8.0 ±0.2
T	10.0 ±0.3
T1	13.4 ±0.4
L	11.0 ±0.5
R1	8.1 ±0.3
R2	9.8 ±0.4
S	4.4 ±0.3
L1	2.5 ± 0.5

Failsafe Current - Time Curve



Gas Discharge Tubes General Characteristics Features Temperature Rating 100% Inspection RoHS Information Solderability Part Marking Terms and Definitions	2 Electrode Mini (2RM) 2 Electrode Standard and High Voltage (2R) 2 Electrode High Current (2N) 2 Electrode Extremely High Current Series (20B) 2 Electrode Switching Series (2T) 3 Electrode Mini (3RM) and Standard (3R) Series 2 Electrode Surface Mount Mini (2SM), Surface Mount (2S), Surface Mount Mini Square (2SS) and Surface Mount Chip (4532) Series 3 Electrode Surface Mount Mini (3SM and 3SSM) Series	Packaging Standard Bulk Packaging Tape & Reel Specifications
--	--	---

[Home](#)