

Ø5.5X6.0mm Series

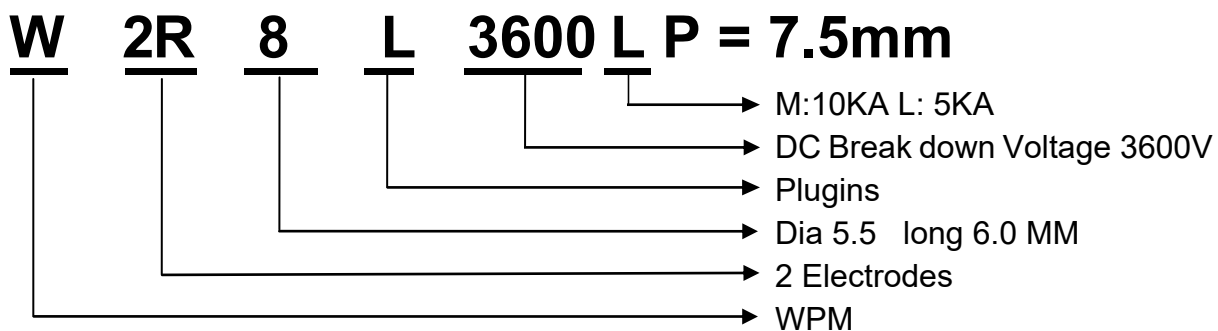
1. Provide ultra-fast response to surge voltage from slow-rising
2. surge of 100V/s to rapid-rising surge of 1KV/μs
3. Stable breakdown voltage
4. High insulation resistance
5. Low capacitance ($\leq 1.0\text{pF}$)
6. High holdover voltage
7. Large absorbing transient current capability
8. Micro-Gap Design
9. Size: 5.5mm*6.0mm
10. Storage and operating temperature: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
11. Meets MSL level 1, per J-STD-020
12. Safety certification: E221527



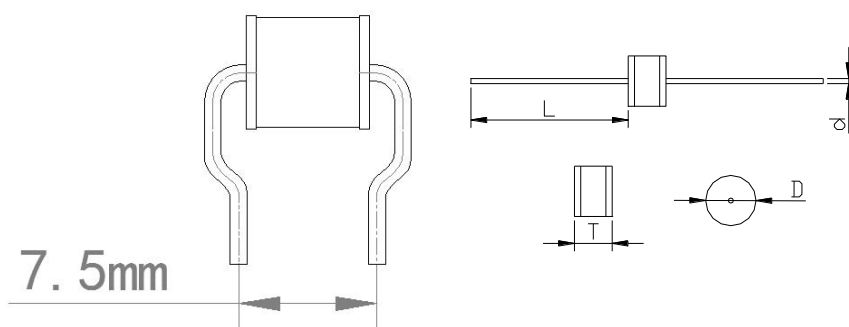
Applications

1. Repeaters, Modems
2. Telephone Interface, Line cards
3. Data communication equipment
4. Line test equipment

Part Number Code



Drawing

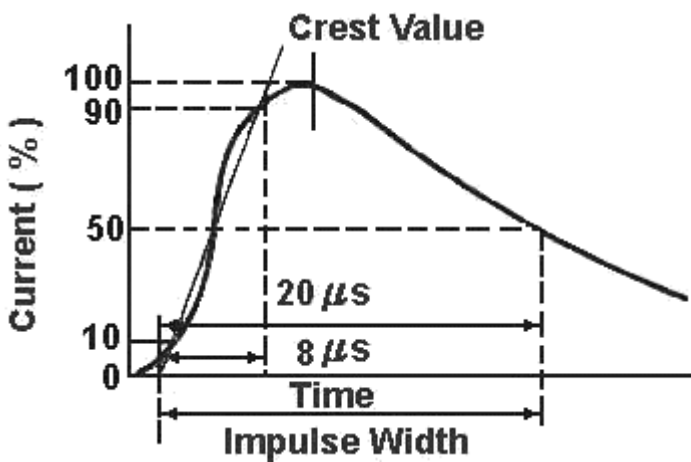


Items	Dimension	
	Spec	Tolerance
D	Ø5.5	± 0.4
T	6.0	± 0.4
L	27.0	Max
d	Ø0.6	± 0.05

Specification

Model Name	DC Breakdown Voltage (V)	Maximum Impulse Breakdown Voltage (V)		Maximum Impulse Discharge Current (8/20 μ s) (KA)		Normal Alternating Discharge Current(A)		Impulse Life (10/1000 μ s) (100A)	DC Holdover Voltage (V)	Minimum Insulation Resistance (G Ω)	Maximum Capacitance (pf)
	100V/s	100V/ μ s	1000V/ μ s	1 time	10 times	50Hz, 1sec	Single 9cycles	times	<150ms	Note2	1MHZ 1V
2R-070	70 $\pm$ 20%	600	650	10	5	5	15	300	52	1	1
2R-075	75 $\pm$ 20%	600	650						52	1	1
2R-090	90 $\pm$ 20%	600	650						52	1	1
2R-120	120 $\pm$ 20%	600	650						52	1	1
2R-130	130 $\pm$ 20%	600	650						52	1	1
2R-145	145 $\pm$ 20%	600	650						52	1	1
2R-230	230 $\pm$ 20%	600	700						80	1	1
2R-250	250 $\pm$ 20%	600	700						80	1	1
2R-300	300 $\pm$ 20%	700	750						150	1	1
2R-350	350 $\pm$ 20%	700	800						150	1	1
2R-400	400 $\pm$ 20%	800	900						150	1	1
2R-500	500 $\pm$ 20%	900	1000						150	1	1
2R-600	600 $\pm$ 20%	950	1050	10	5	2.5	5	300	150	1	1
2R-800	800 $\pm$ 20%	1150	1350						150	1	1
2R-1000	1000 $\pm$ 20%	1300	1400						150	1	1
2R-1200	1200 $\pm$ 20%	1800	2000	5	3	2.5	5	300	150	1	1
2R-1400	1400 $\pm$ 20%	2200	2400						150	1	1
2R-1600	1600 $\pm$ 20%	2400	2600						150	1	1
2R-2000	2000 $\pm$ 20%	2800	3000						150	1	1
2R-2400	2400 $\pm$ 20%	3300	3500						150	1	1
2R-3000	3000 $\pm$ 20%	3800	4000	8x20us	8x20us			>AC 1500V/1Min	150	1	1
2R-3500	3500 $\pm$ 20%	4300	4500	3 KA	100A			>AC 1800V/3Sec	150	1	1
2R-3600	3600 $\pm$ 20%	4400	4600	10 times	300 times			>AC 1800V/3Sec	150	1	1

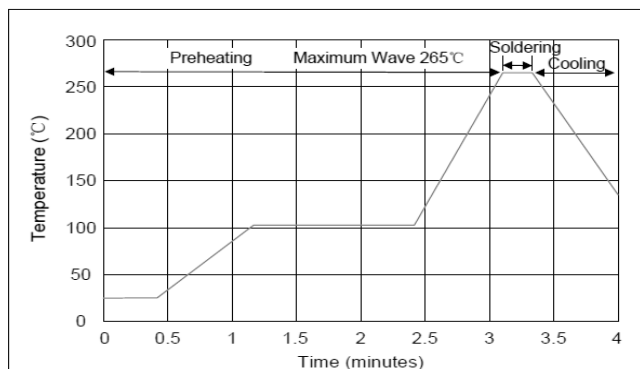
Electrical Rating

Item	Test Condition / Description	Requirement
DC Breakdown Voltage	The voltage is measured with a low rate of rise $dv/dt \div 100 \text{ v/s}$	To meet the specified value
Maximum Impulse	The maximum impulse breakdown voltage is measured with a rise time of $dv/dt \div 1000 \text{ v/}\mu\text{s}$	
Breakdown Voltage	The maximum current within gas tube voltage change of $\pm 20\%$ when one impulse is applied. Applied waveform : 8/20 μsec	
Maximum Impulse Discharge Current		
DC Holdover Voltage	The maximum DC voltage across the two terminals of gas tube under which it may be expected to return to the high impedance state after the gas tube breakdown.	
Insulation Resistance	The resistance of gas tube shall be measured each terminal to each other terminal. Applied voltage: gas tube dc breakdown voltage under 150V, the test voltage is 50V dc; with all other types at 100V dc.	
Capacitance	The capacitance of gas tube shall be measured each terminal to each other terminal. Test frequency : 1 KHZ In measurements involving 3-electrode gas tubes, the terminal not being tested shall be connected to a ground plane.	

Recommended Soldering Conditions

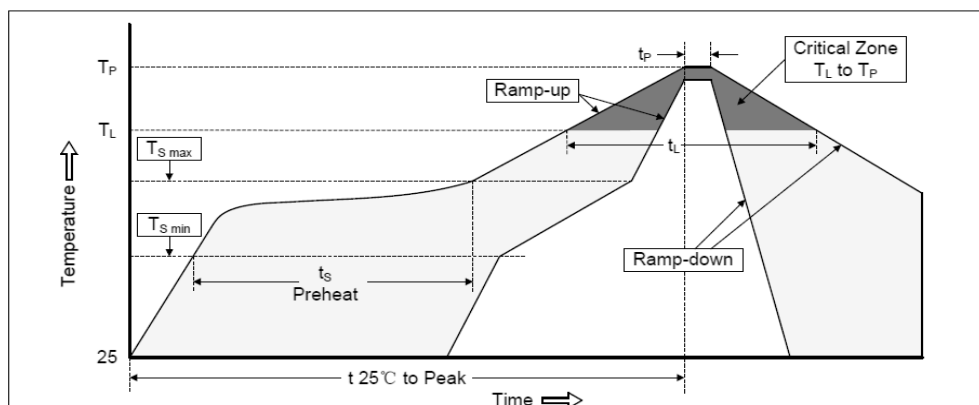
Recommended Soldering Conditions

Wave Soldering



Item	Conditions
Peak Temperature	265°C
Dipping Time	10 seconds
Soldering	1 time

Reflow Soldering

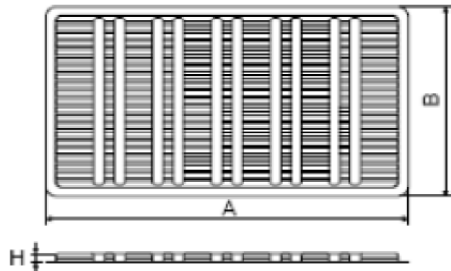


Profile Feature	Pb-Free Assembly
Average ramp-up rate (T _L to T _P)	3°C/second max.
Preheat -Temperature Min (T _{S min}) -Temperature Max (T _{S max}) -Time (min to max) (t _s)	150°C 200°C 60-180 seconds
T _{S max} to T _L -Ramp-up Rate	3°C/second max.
Time maintained above: -Temperature (T _L) -Time (t _L)	217°C 60-150 seconds
Peak Temperature (T _P)	260°C
Time within 5°C of actual Peak Temperature (t _p)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

Packing

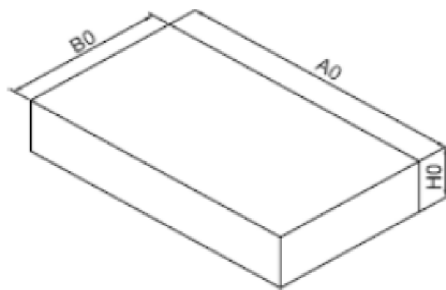
Axial Packing (Box)

Skin packing



Symbol	Dimension (mm)	
	Spec.	Tolerance
A	265.0	±5.0
B	146.0	±5.0
H	6.8	±0.5
Quantity: 100pcs		

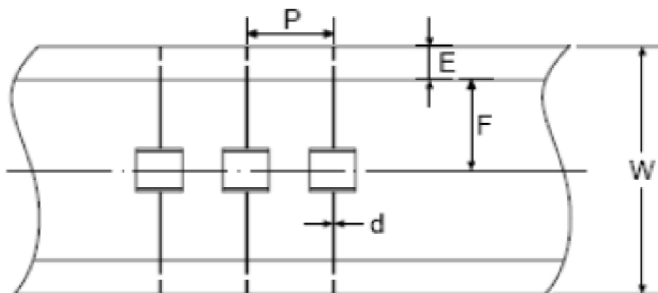
Inner box



A0	270.0	±2.0
B0	150.0	±2.0
H0	50.0	±2.0
Quantity: 500pcs		

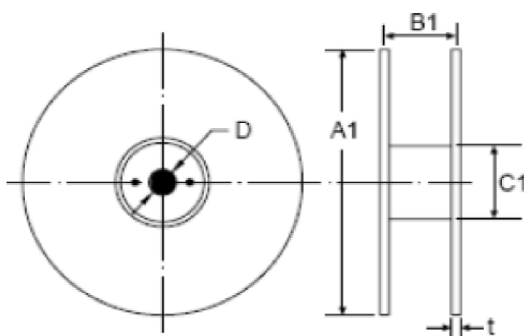
Axial Packing (Tape & Reel)

Tape



Symbol	Dimension (mm)	
	Spec.	Tolerance
P	10.0	±0.5
W	65.0	±1.0
E	6.0	±0.5
F	26.5	±0.5
d	0.8	±0.1

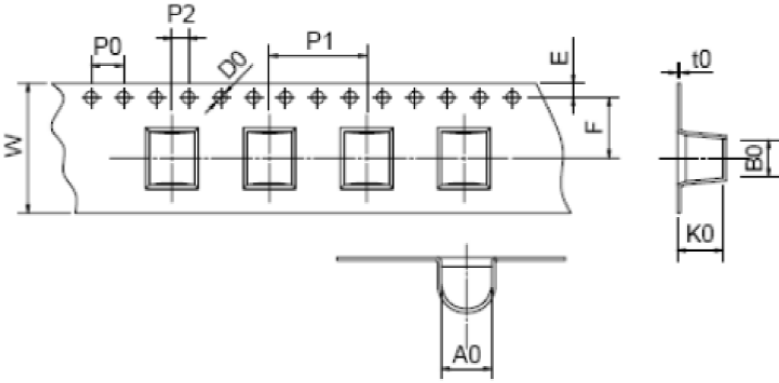
Reel



A1	330.0	±2.0
B1	70.0	±2.0
C1	82.0	±2.0
D	25.0	±0.5
t	2.0	±0.2
Quantity: 1000pcs		

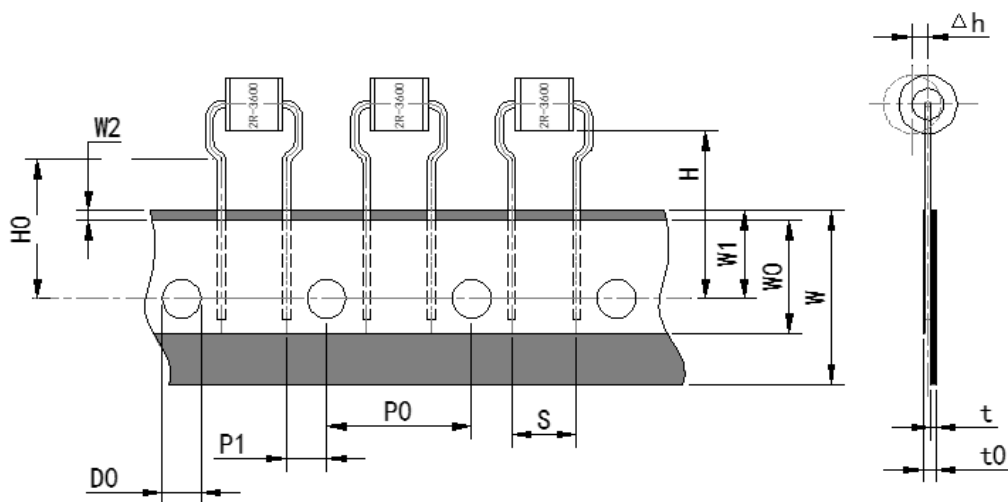
Packing

SMD Packing (Tape & Reel)

Tape	Symbol	Dimension (mm)	
		Spec.	Tolerance
	W	16.00	±0.20
	P0	4.00	±0.10
	P1	12.00	±0.20
	P2	2.00	±0.10
	D0	1.55	±0.05
	E	1.75	±0.10
	F	7.50	±0.10
	A0	5.85	±0.10
	K0	6.20	±0.10
	B0	7.00	±0.10
	t0	0.50	±0.10
	D	330.00	±2.00
	d	13.00	±0.50
Reel	L	20.00	±2.00
	t	2.00	±0.20
	Quantity: 800pcs		

WPMtek

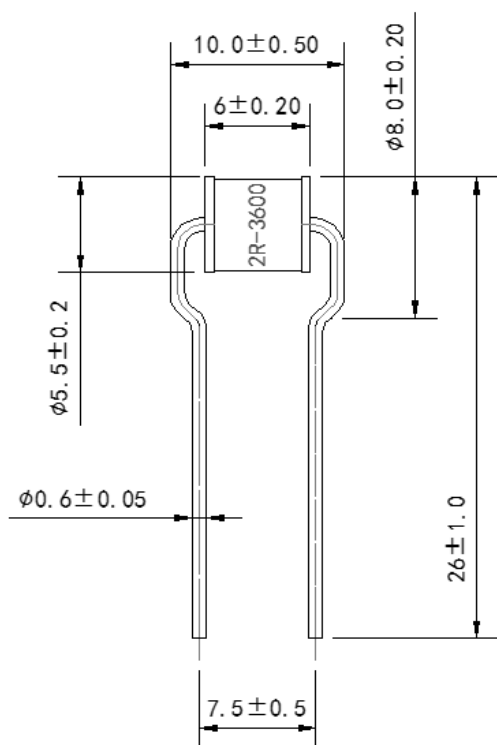
“N” Type Packing



Symbol	Dimension (mm)
H	20 (+2, -1)
H0	18.0 ± 0.5
P0	15.00 ± 0.5
P1	3.75
S	7.5 ± 0.5
D0	4.0 ± 0.2
W	18.0 (+1, -0.5)
W0	12.70
W1	9.10 (+0.75, -0.5)
W2	0-3
t	0.5 (+0.05, -0.10)
t 0	1.5 Max
△h	±2.0 Max

Package

mer box



(Item)	(Description)
(Length)	330mm
(Width)	195mm
(Height)	45mm
(Q'ty)	20 x 25 = 500pcs
(Label)	LOT NO Indicate Part No&Lot No..

Carton



(Item)	(Description)
(Length)	410mm
(Width)	340mm
(Height)	310mm
(Q'ty)	500 x 10 = 5000pcs
(Remarks)	(10 Inner box in Carton)

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