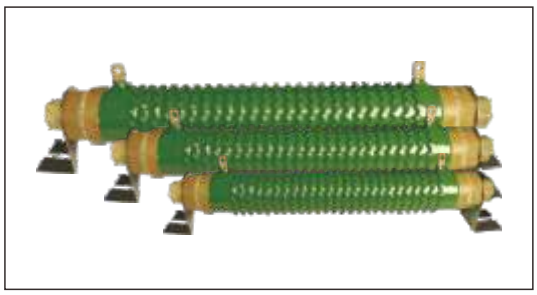
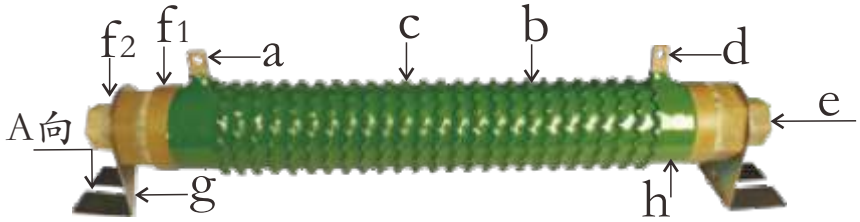
PUG Painted High Power Ceramic Tube Resistors



Body Color
Standard : Green
Marking : According to the customer request to provide corresponding identification

Construction



ad	b	c	e	g	f1,f2	h
Terminal block	Epoxy resin insulating layer	Alloy wire	Epoxy screw	Zinc plating support	Epoxy accessories	Alumina porcelain

Feature

Ⅰ The product surface with solid wave type, which will help to reduce the stray inductance and withstand high current surge.
Ⅱ Good overload and heat durability capacity , the useful time is longer than the others.
Ⅲ Resistance tolerance : ± 5%、 ±10%

Reference Standards

JIS C 5201-1

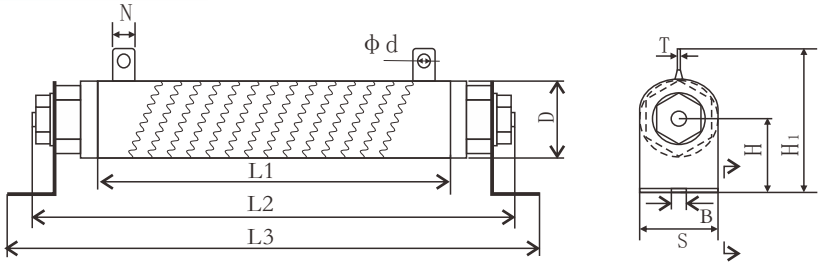
Ordering Information

Example

PUG	300	J	10Ω	A
(1)	(2)	(3)	(4)	(5)
Product Name	Power Rating	Resistance Tolerance	Resistance Value	Special forming

(1)Type:PUG
(2)Power Rating:50=50W,100=100W,300=300W,400=400W…
(3)Resistance Tolerance :J=±5%,K=±10%
(4)Resistance Value: 0.1Ω,0.2Ω,1Ω,10Ω…
(5)Special forming:A1 Without brackets,A2 With Without brackets

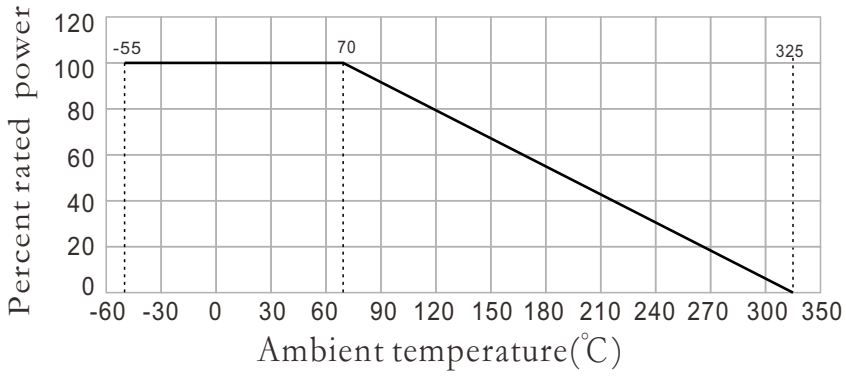
Specifications and Dimensions



Type	Power	Dimensions (mm)										
		L1±2	L2±5	L3±3	D±2	B±1	H±1	H1±3	S±2	N±2	Φ d±1	T±0.5
PUG	20W	62	84	100	20	5	25	34	20	6	3.5	1.0
PUG	30W	82	104	120	20	5	25	34	20	6	3.5	1.0
PUG	50W	102	124	146	28	6.5	28	68	28	8	4.5	1.5
PUG	60W	102	124	146	28	6.5	28	68	28	8	4.5	1.5
PUG	80W	152	174	196	28	6.5	28	68	28	8	4.5	1.5
PUG	100W	182	204	226	28	6.5	28	68	28	8	4.5	1.5
PUG	150W	225	247	270	28	6.5	28	68	28	8	5.5	2.0
PUG	200W	225	247	270	28	6.5	28	68	28	8	5.5	2.0
PUG	300W	285	304	345	40	6.5	40	85	40	10	5.5	2.0
PUG	400W	316	338	375	40	6.5	40	85	40	10	5.5	2.0
PUG	500W	318	338	378	50	6.5	45	100	50	10	6.0	2.0
PUG	600W	348	368	408	50	6.5	45	100	50	10	6.0	2.0
PUG	750W	303	330	368	60	8.5	58	115	60	12	6.0	2.0
PUG	900W	303	330	368	60	8.5	58	115	60	12	6.0	2.0
PUG	1000W	433	460	500	60	8.5	58	115	60	12	6.0	2.0
PUG	1200W	418	445	485	60	8.5	58	115	60	12	6.0	2.0
PUG	1400W	418	445	485	60	8.5	58	115	60	12	6.0	2.0
PUG	1500W	433	460	500	70	8.5	65	125	70	15	6.0	2.0
PUG	1800W	513	540	580	60	8.5	60	119	60	12	6.0	2.0
PUG	2000W	433	475	525	80	8.5	82	170	80	15	6.5	2.0
PUG	2400W	603	630	670	60	8.5	60	119	60	12	6.0	2.0
PUG	2500W	433	475	525	80	8.5	82	170	80	15	6.5	2.0
PUG	3000W	433	475	525	100	8.5	82	170	100	15	6.5	2.0
PUG	5400W	448	505	525	150	10	120	230	150	20	8.5	2.0
PUG	10000W	900	925	980	150	10	120	230	150	20	8.5	2.0

Note: We can according customer requirements to customize the specification and dimension, also can product multiple resistance value of one ceramic tube or cancel the fixed plank.
Our factory can also produce 2500W~15000W non-standard resistors according to the requirement

Derating Curve



Power And Resistance etc

Type	Power (W)	Resistance Range(Ω)	Tolerance	T.C.R PPM/℃	Max Working Voltage (V)	Max Overload Voltage (V)	Operating Temp.Range
PUG	20W	0.1~100	J±5% K±10%	±350	$\sqrt{P \cdot R}$	$6.25\sqrt{P \cdot R}$	-55℃~325℃
PUG	30W	0.1~100					
PUG	50W	0.15~100					
PUG	60W	0.15~100					
PUG	80W	0.2~100					
PUG	100W	0.3~100					
PUG	150W	0.36~200					
PUG	200W	0.43~200					
PUG	300W	0.43~200					
PUG	400W	0.43~300					
PUG	500W	0.5~300					
PUG	600W	0.5~300					
PUG	750W	0.5~500					
PUG	900W	0.5~500					
PUG	1000W	0.5~500					
PUG	1200W	0.5~500					
PUG	1400W	0.5~500					
PUG	1500W	0.5~500					
PUG	1800W	0.5~500					
PUG	2000W	0.5~500					
PUG	2400W	0.5~500					
PUG	2500W	0.5~1000					
PUG	3000W	0.5~1000					
PUG	5400W	0.5~1000					
PUG	10000W	0.5~1000					

Performance

Test Items	Performance	Test Methods(JIS C 5201-1)
Temperature coefficient	±350PPM/℃	Test resistance value at normal temperature and normal temperature added 100℃,calculate℃ resistance value change rate.
Short-time overload	△R≤±(2%R0+0.05Ω)	According 10 times rated power to account the power or max. overload voltage(get the lower) for 5seconds.
Resistance to soldering heat	△R≤±(1%R0+0.05Ω)	Immerge into the 350±10℃ tin stove for 2~3 seconds
Solderability	Tth soldering area is over 98%	Immerge into the 245±3℃ tin stove for 2~3 seconds
Temperature cycle	△R≤±(2%R0+0.05Ω)	At-55℃ for 30min, then at +25℃ for 10~15min,then at +155℃ for 30min, then at +25℃ for 10~5， min,total 5cycles.
Load life in humidity	△R≤±(5%R0+0.1Ω)	Overload rated voltage or Max.working voltage(get the lower)for 1000hours (1.5hours on and half-hour off) at the 40±2℃ and 90~95% relative humidity.
Load life in heat	△R≤±(5%R0+0.05Ω)	Overload rated voltage or Max.working voltage(get the lower) for 1000hours(1.5hours on and half-hour off) at the 70±2℃.
Nonflammability	No visible flame	Respectively load AC voltage by 5,10,16 times rated power for 5 minutes.