

# 82 Series

## Tab & Cover



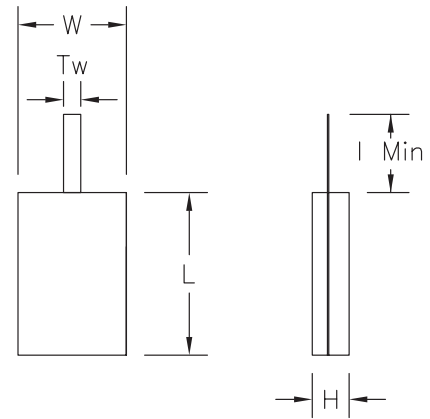
Tab and cover terminations are flangeless devices with protective ceramic covers and tab contacts, offering the highest performance available of any style of component. They are designed for direct solder attachment to a heat sink or circuit board (thermal via required) for excellent heat transfer. These devices deliver excellent VSWR over a broad frequency band. The frequency ranges from DC to 18 GHz. The power rating ranges from 10 to 500 watts. Optional lead forming is available on most designs.

### Specifications

Impedance	50 Ohms
Resistance Range	10 to 300 Ohms
Frequency Range	DC to 18 GHz
Power Rating	100% @ 100°C
Derates to	0% @ 150 °C
Operating Temperature	-55 °C to 150 °C*
Substrate	BeO, AlN or Alumina
Resistor	Thin Film
Tab Contact	Beryllium Copper, Tin or Silver Plated
Cover	Alumina
Solderable Ground Plane	See Plating Option

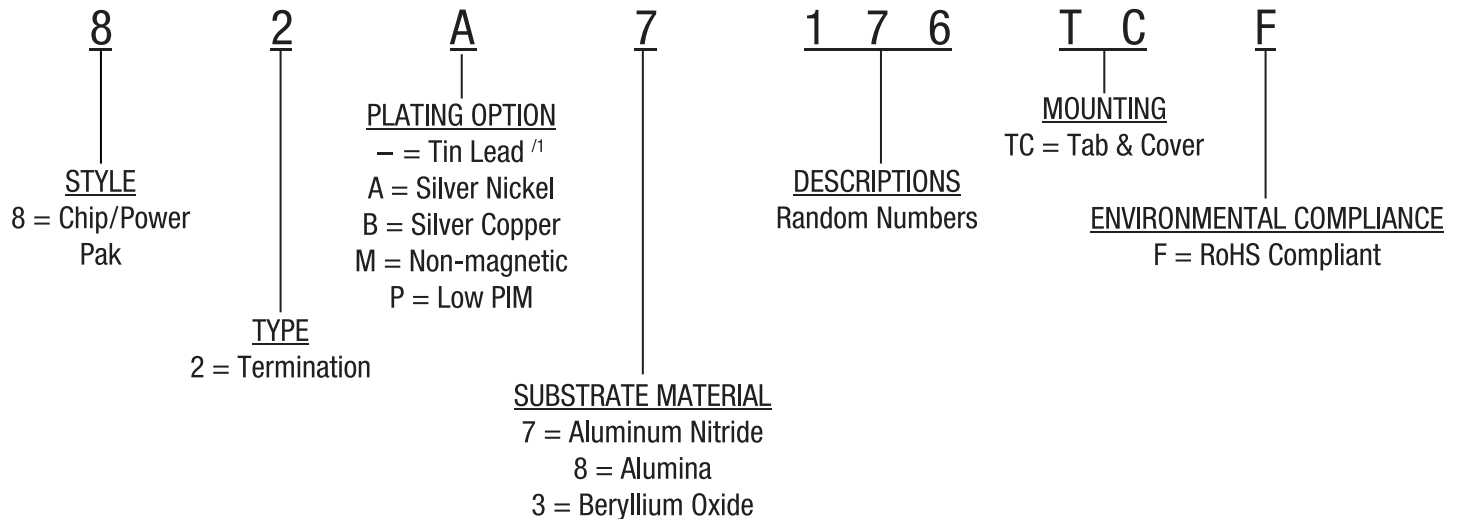
\*100°C is referenced at the heat sink

### TC



"I min" dimension = 3.18 mm [0.125]

### Part Numbering Code



<sup>1</sup> Not RoHS Compliant



# 82 Series

## Product Information

Power	Frequency	VSWR	Substrate	L		W		H		TW		Part Series #
Watt	GHz	Max:1		mm [inches]								
10	2.0	1.18	AlN	5.08	[0.200]	2.54	[0.100]	2.16	[0.085]	0.76	[0.030]	82 7166TC
10	3.0	1.25	AlN	5.08	[0.200]	2.54	[0.100]	2.29	[0.090]	1.02	[0.040]	82 7025TC
10	20.0	1.50	BeO	2.54	[0.100]	5.08	[0.200]	2.29	[0.090]	0.76	[0.030]	82 3056TC
10	18.0	1.65	BeO	2.54	[0.100]	5.08	[0.200]	2.29	[0.090]	1.02	[0.040]	82 3045TC
10	10.0	1.40	BeO	5.08	[0.200]	2.54	[0.100]	2.03	[0.080]	1.02	[0.040]	82 3033TC
10	4.0	1.35	BeO	5.08	[0.200]	2.54	[0.100]	2.29	[0.090]	1.02	[0.040]	82 3001TC
10	4.0	1.35	AlN	5.08	[0.200]	2.54	[0.100]	2.29	[0.090]	2.54	[0.100]	82 7017TC
20	4.0	1.35	BeO	6.35	[0.250]	6.35	[0.250]	2.67	[0.105]	1.52	[0.060]	82 3012TC
30	2.5	1.20	AlN	5.08	[0.200]	2.54	[0.100]	2.16	[0.085]	1.02	[0.040]	82 7004TC
30	2.5	1.20	BeO	3.05	[0.120]	1.53	[0.060]	2.16	[0.085]	0.76	[0.030]	82 3055TC
30	1.0	1.50	BeO	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	1.02	[0.040]	82 3019TC
30	4.0	1.20	BeO	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	1.52	[0.060]	82 3005TC
40	2.0	1.20	AlN	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	0.76	[0.030]	82 7030TC
40	6.0	1.20	BeO	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	1.02	[0.040]	82 3039TC
40	6.0	1.30	BeO	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	1.02	[0.040]	82 3030TC
60	4.0	1.20	AlN	6.35	[0.250]	9.52	[0.375]	2.16	[0.085]	0.76	[0.030]	82 7150TC
60	6.0	1.20	BeO	6.35	[0.250]	9.52	[0.375]	2.16	[0.085]	1.52	[0.060]	82 3032TC
60	2.0	1.35	BeO	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	1.52	[0.060]	82 3003TC
100	4.0	1.20	AlN	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	0.76	[0.030]	82 7163TC
100	1.0	1.10	AlN	6.35	[0.250]	9.52	[0.375]	2.16	[0.085]	1.02	[0.040]	82 7005TC
100	6.0	1.30	BeO	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	1.02	[0.040]	82 3038TC
120	2.0	1.20	AlN	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	0.76	[0.030]	82 7187TC
120	2.0	1.15	AlN	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	0.76	[0.030]	82 7176TC
120	2.0	1.10	AlN	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	0.76	[0.030]	82 7015TC
120	2.0	1.10	BeO	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	1.02	[0.040]	82 3031TC
125	2.7	1.10	AlN	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	1.52	[0.060]	82 7013TC
150	2.0	1.15	AlN	9.52	[0.375]	6.35	[0.250]	2.16	[0.085]	0.76	[0.030]	82 7172TC
150	2.0	1.15	AlN	9.52	[0.375]	6.35	[0.250]	2.16	[0.085]	1.02	[0.040]	82 7002TC
150	4.0	1.35	BeO	8.89	[0.350]	5.84	[0.230]	2.16	[0.085]	1.02	[0.040]	82 3051TC
150	4.0	1.35	BeO	6.35	[0.250]	9.52	[0.375]	2.16	[0.085]	1.02	[0.040]	82 3023TC
150	1.0	1.35	BeO	6.35	[0.250]	9.52	[0.375]	2.16	[0.085]	3.05	[0.120]	82 3006TC
150	3.0	1.20	AlN	6.22	[0.245]	6.22	[0.245]	1.02	[0.004]	1.02	[0.040]	82 7192TE
250	3.0	1.20	BeO	9.53	[0.375]	6.35	[0.250]	2.24	[0.088]	1.02	[0.040]	82 3213TC
250	2.0	1.50	AlN	9.52	[0.375]	9.52	[0.375]	2.16	[0.085]	1.02	[0.040]	82 7001TC
250	2.0	1.15	BeO	9.52	[0.375]	9.52	[0.375]	2.16	[0.085]	0.76	[0.030]	82 3029TC
250	1.0	1.35	BeO	9.52	[0.375]	9.52	[0.375]	2.16	[0.085]	0.76	[0.030]	82 3008TC
500	1.5	1.35	BeO	12.7	[0.500]	12.70	[0.500]	2.03	[0.080]	1.52	[0.060]	82 3040TC
500	2.5	1.25	BeO	12.7	[0.500]	12.7	[0.500]	1.72	[0.068]	1.52	[0.060]	82 3209TC

Peak power is typically 10 times the max power rating with a 1% duty cycle and 100 microsecond pulse width.