

# SERIES ANT, ANR RESISTORS & TERMINATIONS

**RoHS**  
Compliant

High Power, Aluminum Nitride, Thin Film, Drop-in – 10-600 Watts, DC-4 GHz



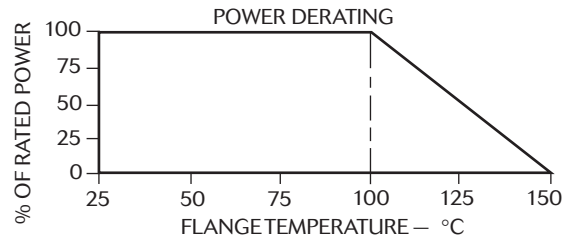
## GENERAL INFORMATION

These high power devices are designed to dissipate power in R.F. circuits when mounted to an appropriate heat sink. The terminations provide a low VSWR under maximum power conditions. The resistor configurations are typically used in "Wilkinson" type power divider networks, or to terminate 3 dB stripline or microstrip hybrids. Aluminum nitride is used for those applications where the use and disposal of beryllium oxide is a concern.

## NOTES

1. Input power ratings are based on flange temperature of 100° C maximum.
2. 50 and 100 Ohms standard. Other values from 10-500 ohms available on special order. Contact factory for details. Standard tolerance  $\pm 5\%$ . Specify resistance value when ordering.
3. VSWR applies to termination style only.

## AVERAGE POWER DERATING CURVE





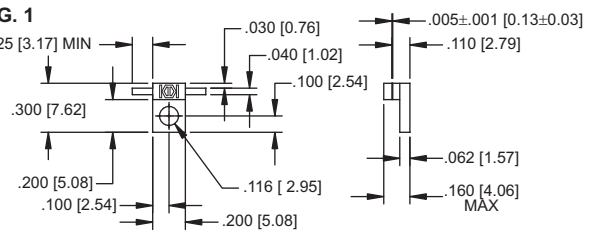


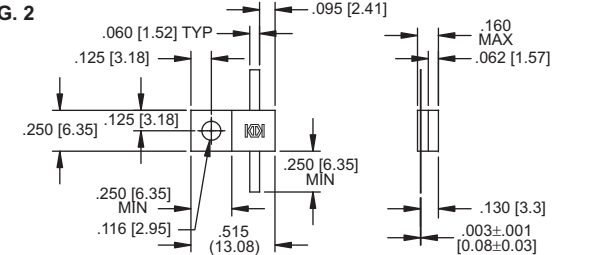

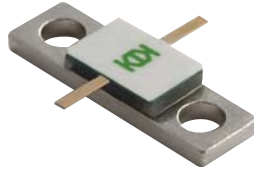
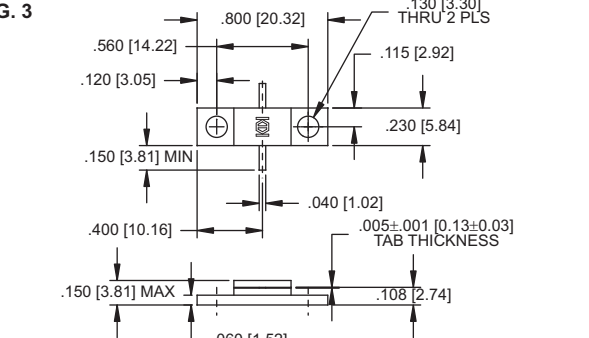
## GENERAL SPECIFICATIONS

Resistive Element	Thin Film
Substrate	Aluminum Nitride
Cover	Alumina Ceramic
Mounting Flange	Copper, Nickel Plated per QQ-N-290
Tab	Beryllium Copper, Gold Plated per MIL-G-4520 4

## PERFORMANCE SPECIFICATIONS

Model	Frequency Range	Input Power (Watts Avg.)	VSWR (Typical) (Note 3)	Capacitance (pF) (Typ.)	Figure No.
ANT & ANR 300-10	DC-4.0 GHz	10	1.25:1	1.0	1
ANT & ANR 515-40	DC-2.5 GHz	40	1.15:1	1.0	2
ANT & ANR 515-80	DC-1.0 GHz	80	1.25:1	1.6	2
ANT & ANR 800-100	DC-2.0 GHz	100	1.25:1	1.4	3
ANT & ANR 870-150	DC-2.0 GHz	150	1.25:1	4.5	4
ANT & ANR 975-200	DC-1.0 GHz	200	1.25:1	4.5	5
ANT & ANR 1250-400	DC-500 MHz	400	1.50:1	7.0	6
ANT & ANR 1900-600	DC-500 MHz	600	1.50:1	15.0	7



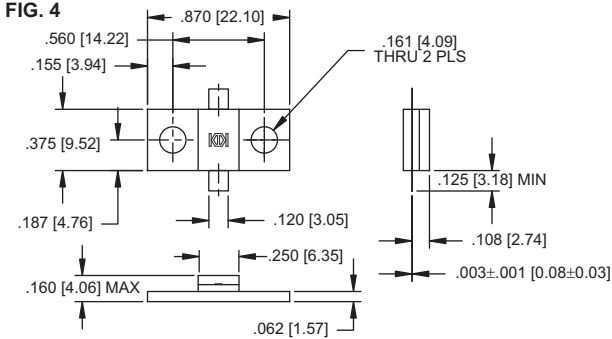

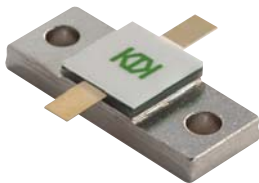
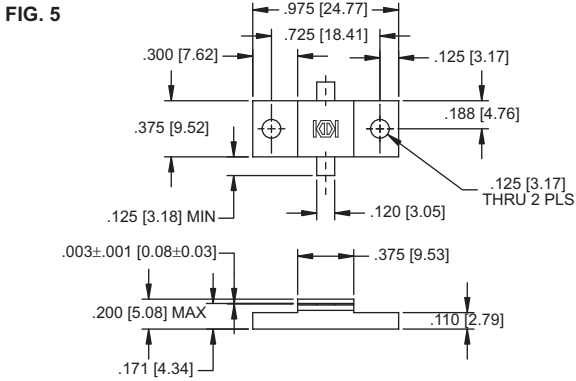


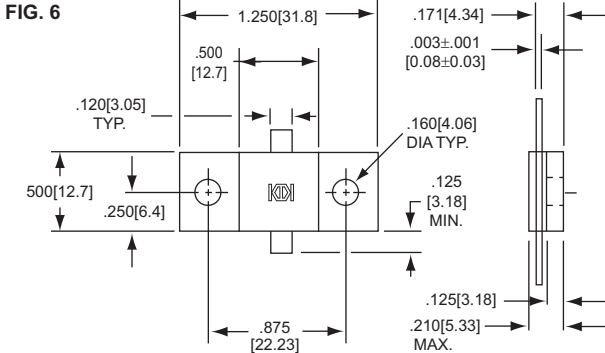

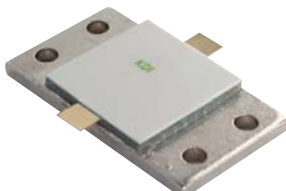
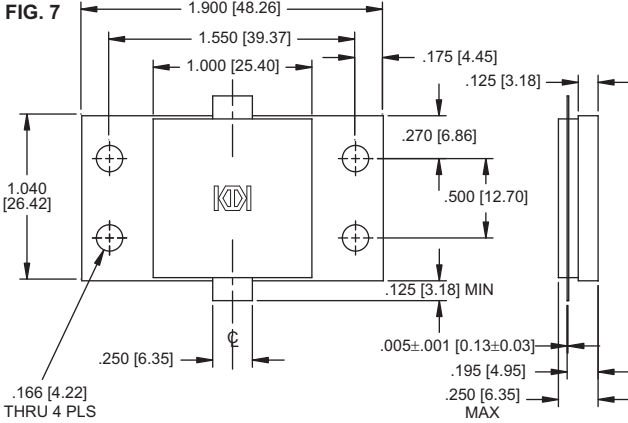
## PHYSICAL DIMENSIONS

TERMINATIONS (ANT) SERIES	RESISTORS (ANR) SERIES	FIGURES
<b>ANT 300-10 — 10 WATTS</b> Flange Mounted 	<b>ANR 300-10 — 10 WATTS</b> Flange Mounted 	<b>FIG. 1</b> 
<b>ANT 515-40 — 40 WATTS</b> <b>ANT 515-80 — 80 WATTS</b> Flange Mounted 	<b>ANR 515-40 — 40 WATTS</b> <b>ANR 515-80 — 80 WATTS</b> Flange Mounted 	<b>FIG. 2</b> 
<b>ANT 800-100 — 100 WATTS</b> Flange Mounted 	<b>ANR 800-100 — 100 WATTS</b> Flange Mounted 	<b>FIG. 3</b> 

KEY: Inches [Millimeters] .XX  $\pm$  .03 .XXX  $\pm$  .010 LX  $\pm$  0.8 XX  $\pm$  0.25]

# SERIES ANT, ANR RESISTORS & TERMINATIONS

## PHYSICAL DIMENSIONS

TERMINATIONS (ANT) SERIES	RESISTORS (ANR) SERIES	FIGURES
<b>ANT 870-150</b> — 150 WATTS Flange Mounted  	<b>ANR 870-150</b> — 150 WATTS Flange Mounted  	<b>FIG. 4</b> 
<b>ANT 975-200</b> — 200 WATTS Flange Mounted  	<b>ANR 975-200</b> — 200 WATTS Flange Mounted  	<b>FIG. 5</b> 
<b>ANT 1250-400</b> — 400 WATTS Flange Mounted  	<b>ANR 1250-400</b> — 400 WATTS Flange Mounted  	<b>FIG. 6</b> 
<b>ANT 1900-600</b> — 600 WATTS Flange Mounted  	<b>ANR 1900-600</b> — 600 WATTS Flange Mounted  	<b>FIG. 7</b> 

KEY: Inches [Millimeters] .XX ±.03 .XXX ±.010 [X ±0.8 .XX ±0.25]