

HIGH POWER MULTITHROW PIN DIODE HYBRID

- High Power Capability (Up to 1000W of CW)
- Low Distortion
- SP2T and SP3T Designs
- High Reliability
- Frequency Range from 1.5 to 1000 MHz
- Low Insertion Loss
- High Isolation

DESCRIPTION

The Narda multithrow switches are constructed by incorporating advance hybrid technology and utilizing ceramic-glass passivated high voltage PIN diode chips distinguished by their low loss and distortion performance.

These RF switch hybrids are available in both SPDT and SP3T configurations. The applicable frequency ranges are from 1.5 to 1000 MHz, and can handle power levels up to 1000W CW.

APPLICATIONS

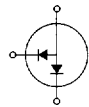
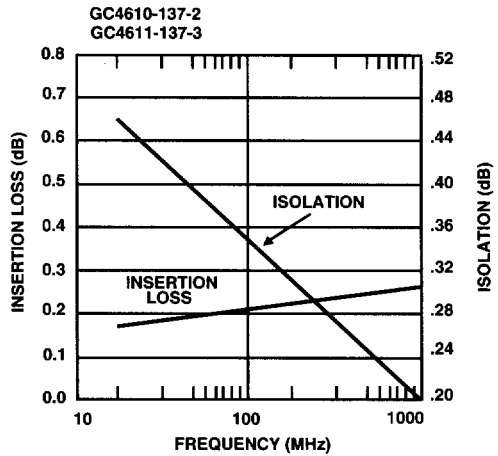
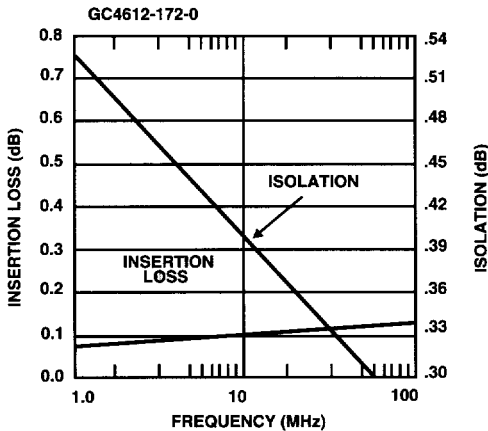
Applications for our GC4610 series high power switch modules include transmit-receive switching for single or dual antenna ports and matrix switching of any configuration.

MODEL NUMBER	CASE STYLE	SWITCH TYPE ¹	FREQUENCY RANGE (MHz) TYP	LOSS "L"	ISOLATION "I"	INPUT POWER "PIN" CW (W) (MAX) ⁵	SUGGESTED BIAS ⁶ CONDITIONS	
				F (MHz) I _r (mA) (dB MAX)	F (MHz) V _r (V) (dB MIN)		FORWARD (ImA) TYP	REVERSE (V) TYP
				400 MHz 100 mA ²	400 MHz 150 V ³			
GC4610	137-2	SP2T	20 - 1000	0.35	25	100	200	150
GC4611	137-3	SP3T	20 - 1000	0.35	25	100	200	150
				10 MHz 200 mA ²	10 MHz 200 V ³			
GC4612	172-0	SP2T	1.5 - 50	0.15	37	1000	1000	700

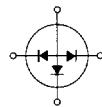
Notes:

1. Other configuration available upon request.
2. The "ON" branch is forward biased.
3. The "OFF" branch is reversed biased.
4. Nominal thermal resistance is 10°C/W per diode, for 100 watt switches and 1.5°C/W per diode for 1000 watt switches.
5. Nominal minority carrier lifetime is 3μsec for GC4610, GC4611 and 10μsec for GC4612
6. Minimum bias requirements for low distortion on frequency and power RF.

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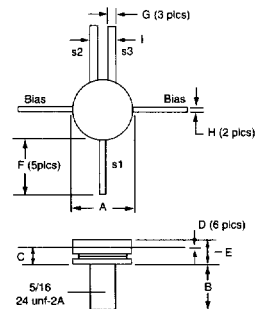
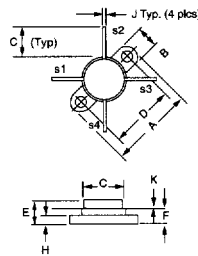
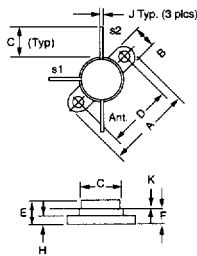
GC4610 - 137 - 2



GC4611 - 137 - 3



GC4612 - 172 - 0



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.970	0.980	24.64	24.89
B	0.240	0.260	6.10	6.60
C	0.460	0.500	11.68	12.70
D	0.720	0.730	18.29	18.54
E	0.250	0.290	6.35	7.37
F	0.150	0.190	3.81	4.83
G	0.350	0.390	8.89	9.91
H	1.080	0.120	2.03	3.05
J	0.045	1.055	1.14	1.40
K	0.010	-	0.25	-

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	.740	.760	18.80	19.30
B	.552	.577	14.02	14.65
C	.210	.220	5.33	5.59
D	.007	.014	0.17	0.35
E	-	1.55	-	3.93
F	.485	.750	12.31	19.05
G	.095	.110	2.41	2.80
H	.035	.045	0.90	1.14
I	.305	.345	7.74	8.77