

Limiter

[illegible]

CASE STYLE: TT1224

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Input Power	2W

Permanent damage may occur if any of these limits are exceeded.

INPUT	1
OUTPUT	4
GROUND	2,3,5,6

A	B	C	D	E	F	G	H
.25	.31	.16	.100	.040	.055	.060	.065
6.35	7.87	4.06	2.54	1.02	1.40	1.52	1.65
J	K	L	M	N	P	Q	wt.
.300	.060	.160	.025	.100	.110	.070	grams
7.62	1.52	4.06	0.64	2.54	2.79	1.78	0.16

Figure 1 is a mechanical drawing of the package outline for the 17X020 PTH. The drawing shows a rectangular package with various dimensions and features. Key dimensions include: .066 TRACE WIDTH, 3 PL. (SEE NOTE BELOW); .037, 2 PL. (top edge); .030, TYP (top edge); .040, 2 PL. (top edge); .020 2 PL. (top edge); .060, 2 PL. (left edge); 2X .065 (bottom edge); 2X .020 2 PL. (bottom edge); 4X .050 (bottom edge); and 17X .020 PTH FOR GROUND (bottom edge). The package outline is shown in blue, and the ground pads are shown in red. The drawing is labeled 'PIN 6' at the bottom center.

NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" $\pm$.002"; COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

 DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

 DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Notes:

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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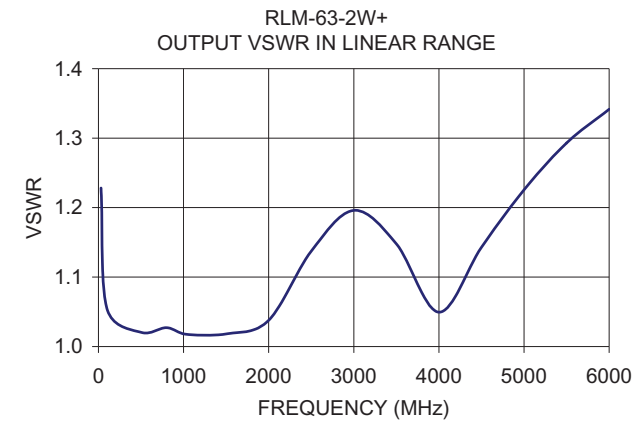
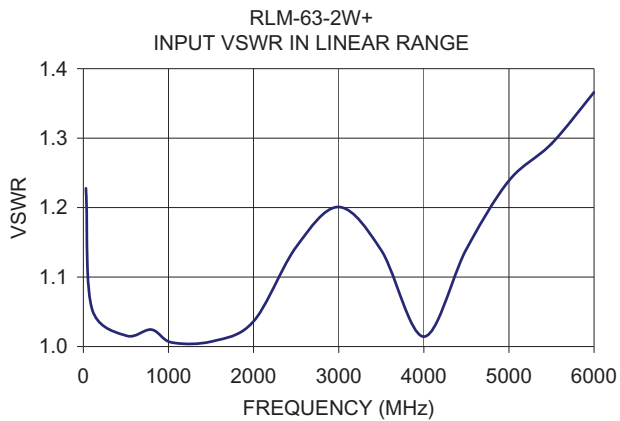
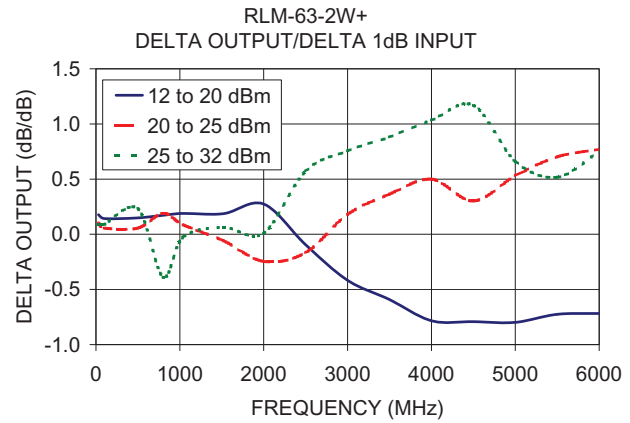
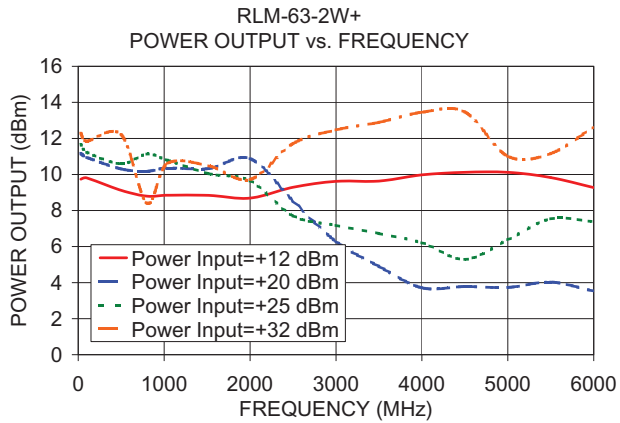
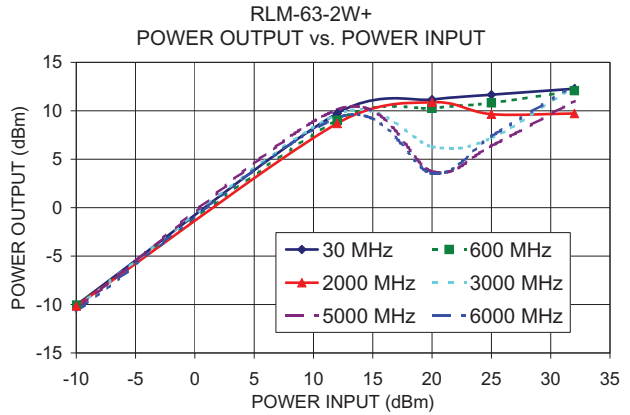
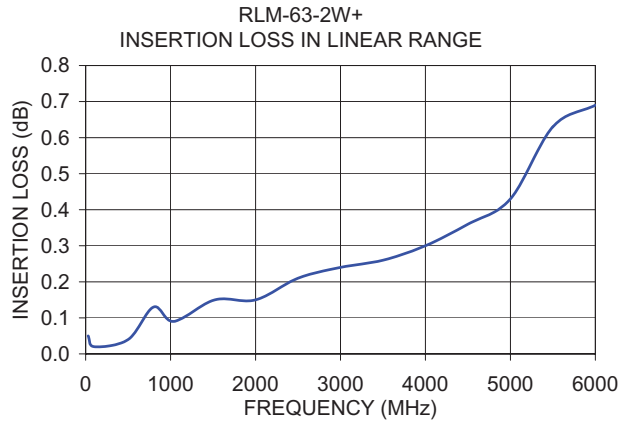
- wideband, 30 to 6000 MHz
- low insertion loss 0.3 dB typ.
- fast recovery time, 10nsec typ.
- excellent VSWR 1.2:1 typ.
- low output power, 11.5 dBm typ.

- military, hi-rel applications
- stabilizing generator outputs
- reducing amplitude variations
- protects low noise amplifiers and other devices from ESD or input power damage

Parameter	Condition	Min.	Typ.	Max.	Units
Frequency Range		30	—	6000	MHz
Linear Range					
Max Input Power	less than 0.1 dB compression	—	—	3	dBm
Insertion Loss	less than +3 dBm input power	—	0.3	1.3	dB
VSWR	less than +3 dBm input power	—	1.2	1.6	:1
Limiting Range					
Input Power	>1dB compression filtered signal frequency	+12	—	+32	dBm
Output Power		—	+11.5	—	dBm
Δ Output/ Δ 1dB Input	Input Power Range (dBm)				dB/dB
	12 to 20	—	0.4	—	
	20 to 25	—	0.2	—	
	25 to 32	—	0.8	—	
Recovery Time	1 watt pulse 50 μ sec pw 1kHz duty cycle recovery to within 90% of final value.	—	10	—	nsec
Response Time	-30 to +30 dBm input 50 μ sec PW 1 kHz duty cycle	—	2	—	nsec

Freq. (MHz)	I. Loss (dB) in Linear Range at +3 dBm	VSWR (:1) in Linear Range at +3 dBm	Power Output (dBm)				Δ Output / Δ 1dB Input		
			+12 dBm Input	+20 dBm Input	+25 dBm Input	+32dBm Input	+12 to +20 dBm Input	+20 to +25 dBm Input	+25 to +32 dBm Input
30.00	0.05	1.23	9.74	11.16	11.66	12.28	0.18	0.10	0.09
100.00	0.02	1.06	9.81	10.95	11.23	11.85	0.14	0.06	0.09
500.00	0.04	1.02	9.12	10.31	10.59	12.21	0.15	0.06	0.23
800.00	0.13	1.02	8.80	10.18	11.13	8.41	0.17	0.19	-0.38
1040.00	0.09	1.01	8.85	10.36	10.79	10.61	0.19	0.09	-0.03
1520.00	0.15	1.01	8.84	10.33	10.04	10.48	0.19	-0.06	0.06
2000.00	0.21	1.04	8.69	10.88	9.65	9.72	0.27	-0.25	0.01
2500.00	0.21	1.14	9.29	8.53	7.70	11.71	-0.10	-0.17	0.57
3000.00	0.24	1.20	9.62	6.28	7.18	12.47	-0.42	0.18	0.76
3500.00	0.26	1.14	9.63	4.90	6.72	12.89	-0.59	0.36	0.88
4000.00	0.30	1.01	9.98	3.71	6.21	13.45	-0.78	0.50	1.03
4500.00	0.36	1.14	10.12	3.78	5.29	13.47	-0.79	0.30	1.17
5000.00	0.43	1.24	10.12	3.73	6.38	11.01	-0.80	0.53	0.66
5500.00	0.63	1.29	9.83	4.03	7.54	11.16	-0.73	0.70	0.52
6000.00	0.69	1.37	9.27	3.53	7.38	12.63	-0.72	0.77	0.75

REV. A
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RLM-63-2W+
ED-14229
DJ/CP/AM
200813
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Notes

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