

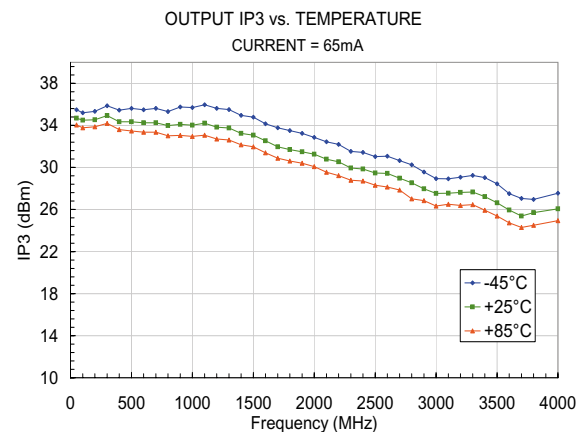
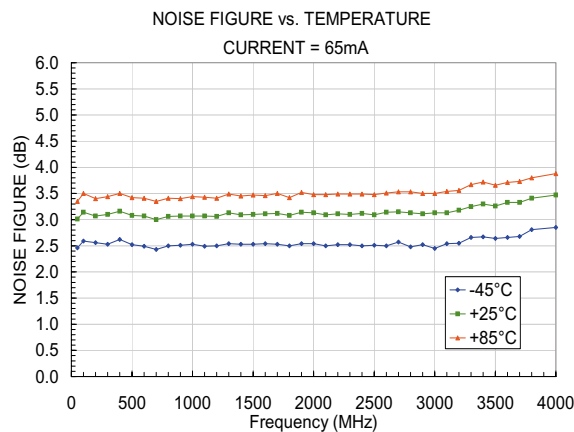
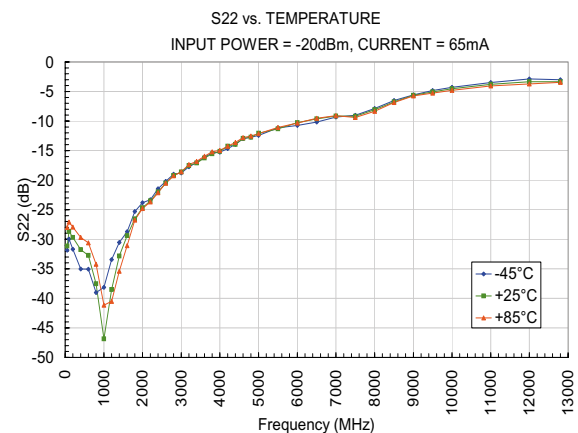
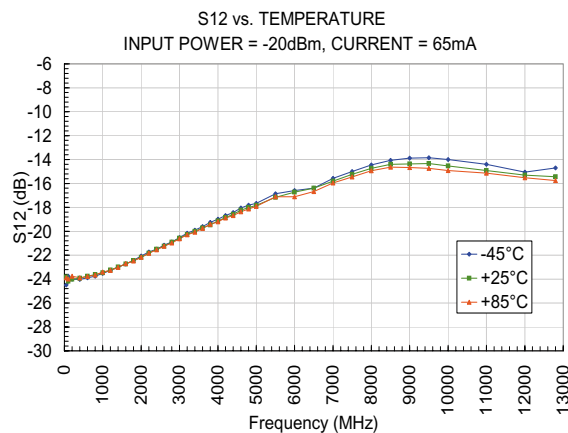
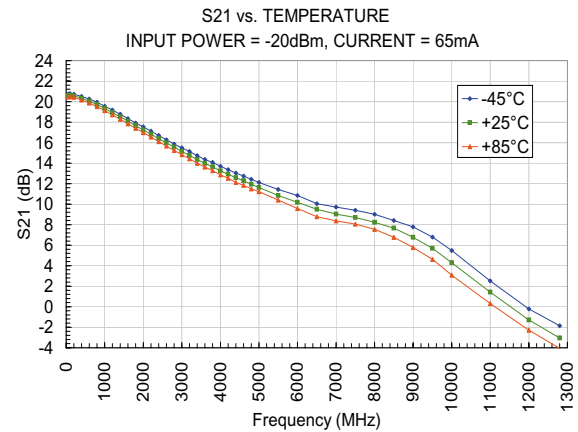
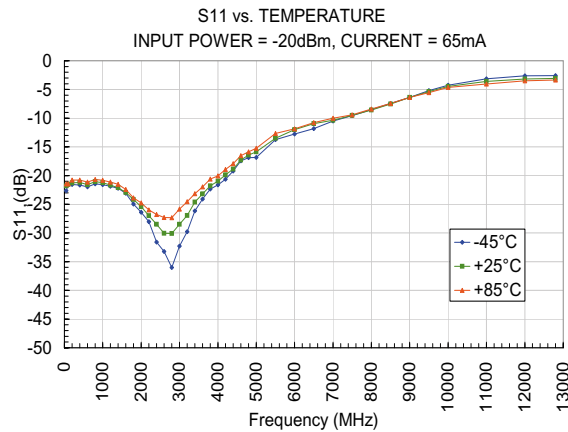
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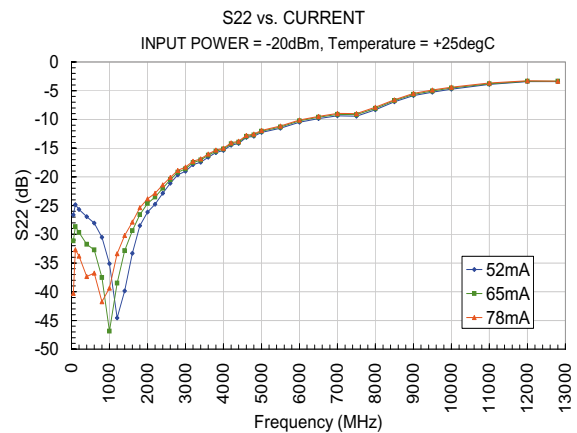
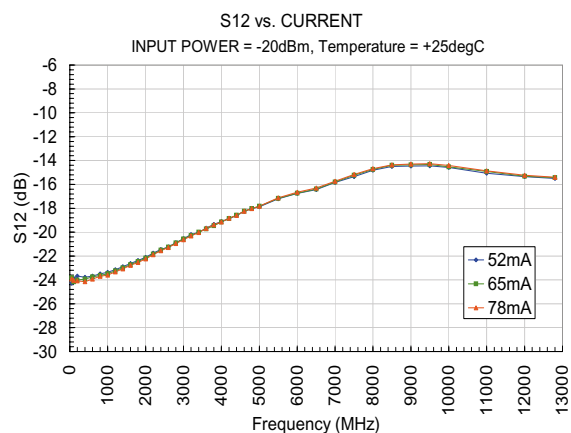
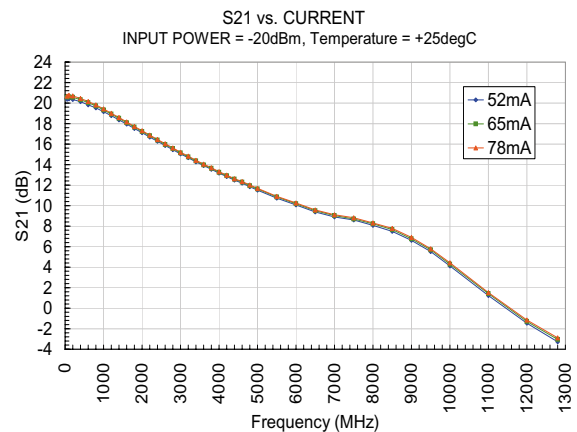
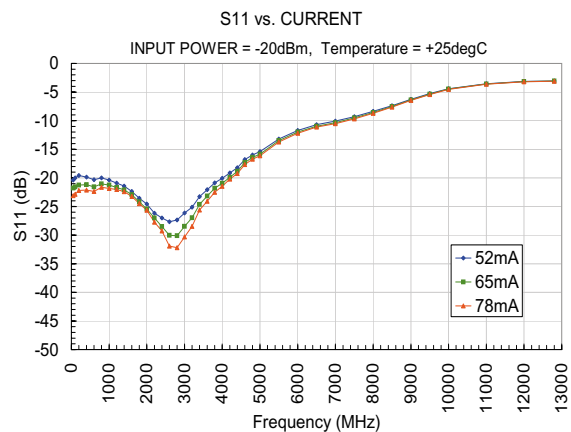
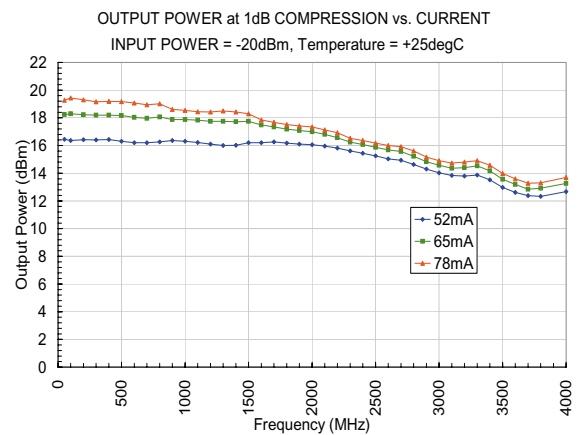
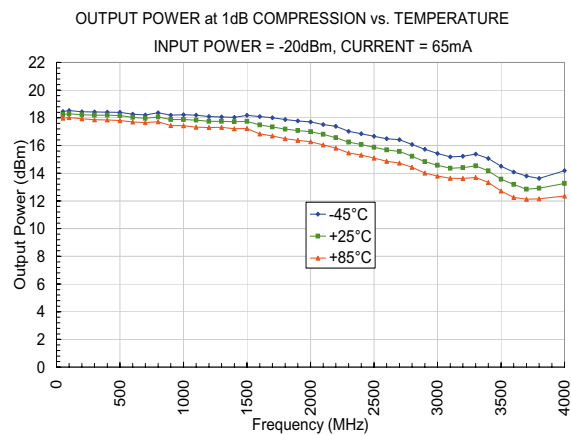
+ RoHS compliant in accordance
with EU Directive (2002/95/EC)

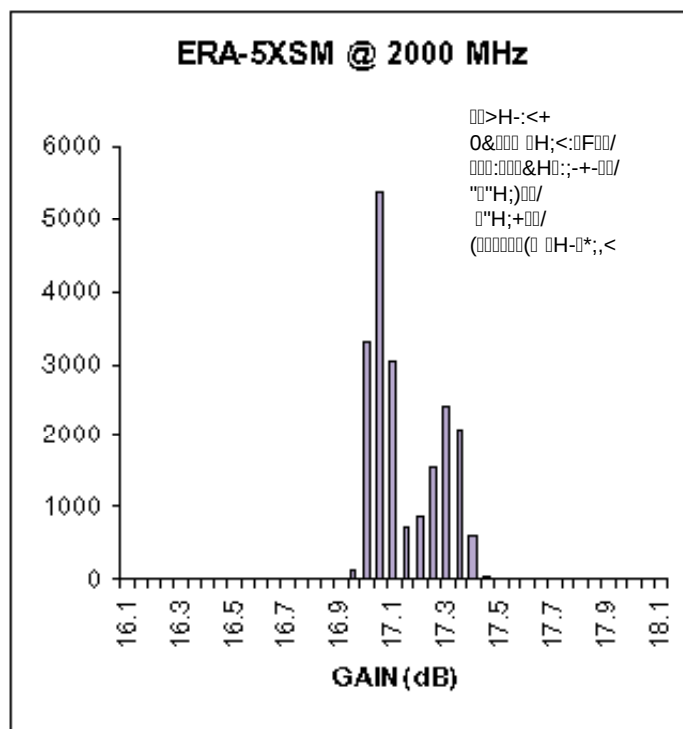
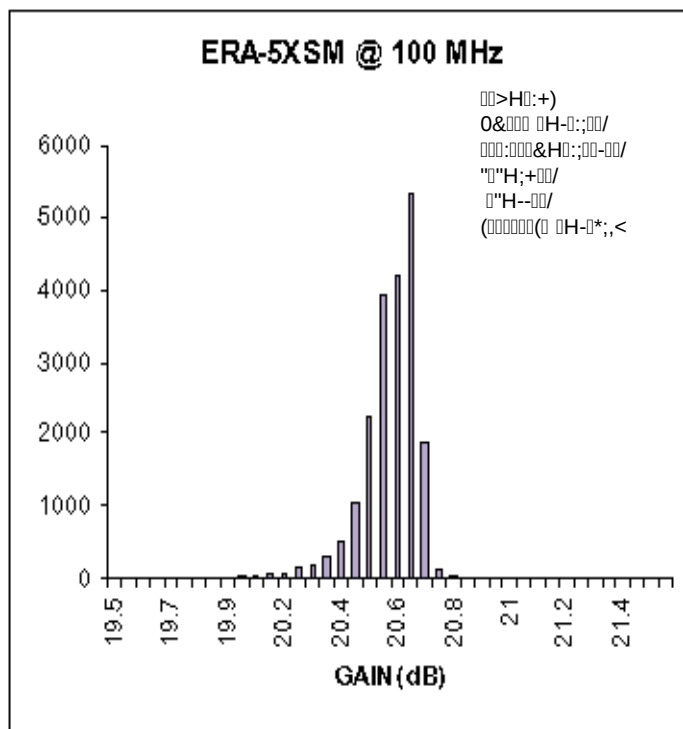
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Freq.	S11			S21			S12			S22			K
MHz	dB	Mag	Angle	dB	Mag	Angle	dB	Mag	Angle	dB	Mag	Angle	
50.00	-21.78	0.08	-7.26	20.59	10.70	173.73	-23.82	0.06	-1.80	-31.15	0.03	12.78	1.07
100.00	-21.56	0.08	-3.49	20.61	10.73	168.05	-24.17	0.06	-5.28	-28.67	0.04	-6.95	1.08
200.00	-21.26	0.09	-11.36	20.57	10.68	156.37	-24.01	0.06	-10.57	-29.69	0.03	-10.12	1.08
400.00	-21.19	0.09	-18.58	20.34	10.40	133.56	-23.93	0.06	-21.76	-31.74	0.03	-30.73	1.08
600.00	-21.58	0.08	-30.61	20.03	10.03	111.04	-23.75	0.07	-33.17	-32.73	0.02	-33.56	1.09
800.00	-21.05	0.09	-43.40	19.72	9.68	88.97	-23.63	0.07	-44.24	-37.52	0.01	-48.14	1.10
1000.00	-21.24	0.09	-56.66	19.33	9.26	67.32	-23.48	0.07	-55.79	-46.85	0.00	-16.81	1.11
1200.00	-21.66	0.08	-69.62	18.92	8.83	46.10	-23.24	0.07	-67.12	-38.51	0.01	71.65	1.12
1400.00	-22.10	0.08	-85.98	18.51	8.42	25.31	-22.99	0.07	-79.08	-32.84	0.02	56.89	1.13
1600.00	-22.94	0.07	-101.92	18.08	8.02	4.84	-22.73	0.07	-91.03	-29.38	0.03	46.32	1.14
1800.00	-24.18	0.06	-121.65	17.65	7.63	-15.31	-22.45	0.08	-103.03	-26.57	0.05	37.37	1.15
2000.00	-25.42	0.05	-143.33	17.22	7.26	-35.03	-22.18	0.08	-115.80	-24.65	0.06	18.00	1.16
2200.00	-26.99	0.04	-168.99	16.81	6.93	-54.63	-21.84	0.08	-128.01	-23.52	0.07	1.49	1.16
2400.00	-28.50	0.04	164.00	16.39	6.60	-73.95	-21.50	0.08	-140.98	-22.00	0.08	-12.28	1.17
2600.00	-30.04	0.03	125.13	15.96	6.28	-92.95	-21.25	0.09	-153.46	-20.49	0.09	-24.89	1.18
2800.00	-30.09	0.03	78.39	15.57	6.00	-111.87	-20.91	0.09	-167.13	-19.21	0.11	-38.61	1.18
3000.00	-28.48	0.04	45.01	15.14	5.71	-131.03	-20.57	0.09	179.32	-18.61	0.12	-53.52	1.19
3200.00	-26.97	0.04	9.53	14.75	5.46	-149.47	-20.28	0.10	165.90	-17.54	0.13	-67.62	1.19
3400.00	-24.62	0.06	-17.05	14.36	5.22	-168.00	-20.00	0.10	152.10	-17.09	0.14	-85.38	1.20
3600.00	-23.17	0.07	-39.17	13.98	5.00	173.58	-19.73	0.10	138.05	-16.24	0.15	-99.63	1.20
3800.00	-21.80	0.08	-61.61	13.63	4.80	155.15	-19.47	0.11	123.88	-15.54	0.17	-115.18	1.20
4000.00	-20.94	0.09	-82.84	13.25	4.60	137.27	-19.14	0.11	109.98	-15.15	0.17	-131.03	1.20
4200.00	-19.88	0.10	-106.70	12.92	4.43	119.19	-18.86	0.11	95.43	-14.26	0.19	-145.08	1.20
4400.00	-18.85	0.11	-123.53	12.58	4.26	101.19	-18.58	0.12	81.30	-13.96	0.20	-162.55	1.20
4600.00	-17.30	0.14	-144.85	12.30	4.12	83.02	-18.24	0.12	66.49	-12.95	0.23	-176.70	1.19
4800.00	-16.42	0.15	-164.22	11.94	3.95	65.07	-18.02	0.13	51.54	-12.73	0.23	166.15	1.19
5000.00	-15.85	0.16	175.38	11.62	3.81	47.64	-17.83	0.13	37.63	-12.07	0.25	151.92	1.20
5500.00	-13.49	0.21	133.44	10.85	3.49	2.91	-17.17	0.14	-0.60	-11.33	0.27	107.83	1.19
6000.00	-11.98	0.25	91.11	10.19	3.23	-40.26	-16.73	0.15	-37.47	-10.26	0.31	71.42	1.17
6500.00	-10.96	0.28	48.77	9.51	2.99	-83.57	-16.39	0.15	-75.97	-9.62	0.33	32.58	1.18
7000.00	-10.34	0.30	8.80	9.03	2.83	-127.14	-15.80	0.16	-114.00	-9.14	0.35	-3.26	1.14
7500.00	-9.52	0.33	-29.87	8.71	2.73	-171.88	-15.24	0.17	-153.67	-9.18	0.35	-46.21	1.10
8000.00	-8.57	0.37	-76.53	8.23	2.58	142.03	-14.74	0.18	165.07	-8.07	0.40	-89.96	1.06
8500.00	-7.52	0.42	-125.63	7.67	2.42	95.35	-14.40	0.19	123.52	-6.74	0.46	-131.22	1.02

Definitions:

dB values=20 log (Mag)

Input Return Loss= -(S11, dB)

Gain (Power Gain)= (S21, dB)

Reverse Isolation= -(S12, dB)

Output Return Loss= -(S22, dB)

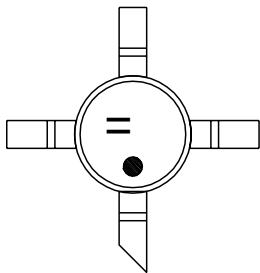
INTERNET <http://www.minicircuits.com>

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

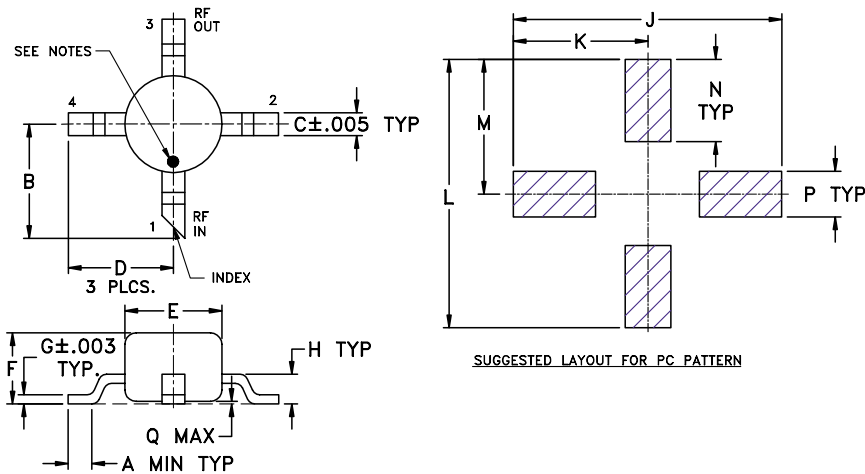
Mini-Circuits ISO 9001 & ISO 14001 Certified

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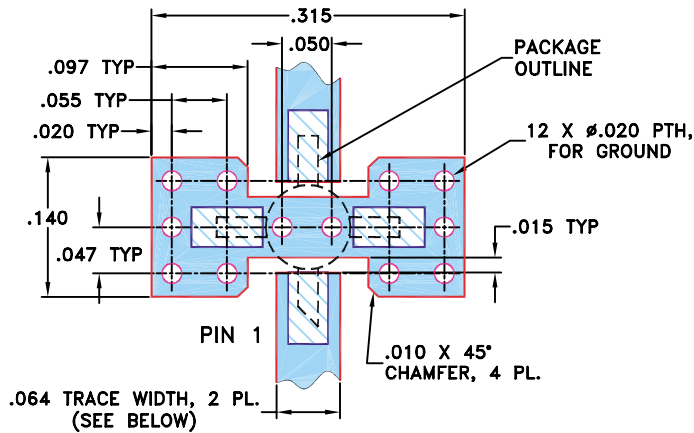
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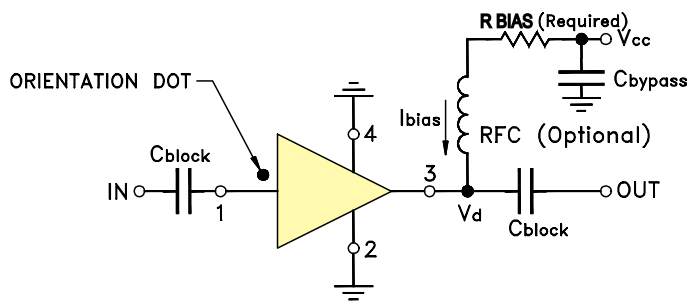


NOTES:

1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .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.
3. IF PCB DESIGN RULES ALLOW, PLACE GROUND VIAS UNDER THE LAND PATTERN FOR BETTER RF PERFORMANCE. OTHERWISE PLACE GROUND VIAS AS CLOSE TO LAND PATTERN AS POSSIBLE.

 DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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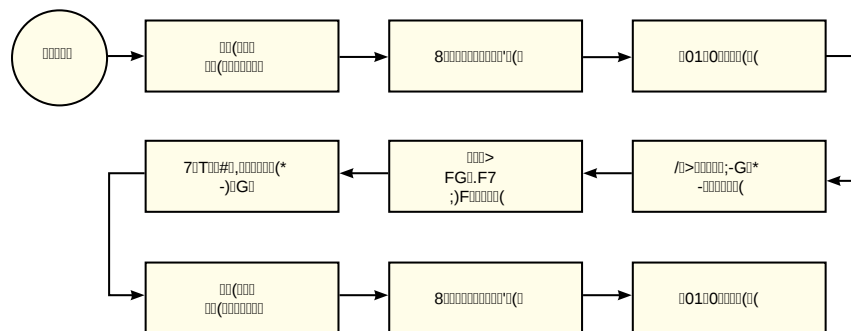
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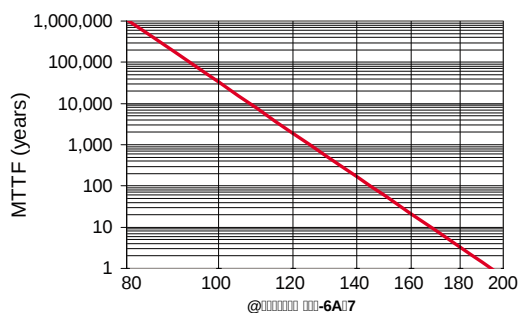
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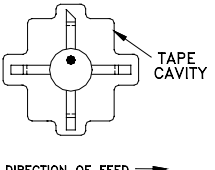


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