

Cascadable Thin Film Amplifier, 28.5 dB Gain

10 - 1000 MHz

AM-/AMC-183

V2.00

Features

- High Gain — 28 dB Typical
- High Compression — +15 dBm Typical

Guaranteed Specifications*

(From -55°C to +85°C Case Temp)

Frequency Range	10-1000 MHz
Gain (+25°C) @ 700 MHz	28.5 ± 1.0 dB
Frequency Response	± 1.5 dB Max
Gain Variation with Temperature	± 1.2 dB Max
Output Power (1 dB Compression)	+13 dBm Min
Noise Figure	10-500 MHz 4.5 dB Max 10-1000 MHz 5.0 dB Max
Reverse Transmission	-32 dB Max -35 dB Typ
VSWR	2.0:1 Max
Intermodulation Intercept Point (for two-tone output power up to 0 dBm)	
Second Order	+30 dBm Min
Third Order	+20 dBm Min
Bias Power	+15 VDC @80 mA Max (72 mA, 1.1W Typ)

Operating Characteristics

Impedance	50 Ohms Nominal
Maximum Rating	
RF Input	+13 dBm
Environmental	
MIL-STD-883 screening available.	

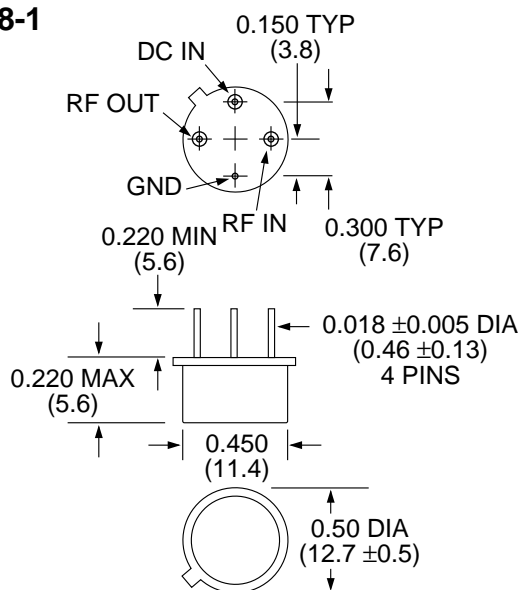
*All specifications apply when operated at +15VDC, with 50 ohm source and load impedance. This product contains elements protected by U.S. Patent Number 3, 891, 934.

Heat Sinking: Operation at case temperature above 95°C is not recommended. Heat sinking adequate to dissipate 1.25 W. Must be provided in use.

Ordering Information

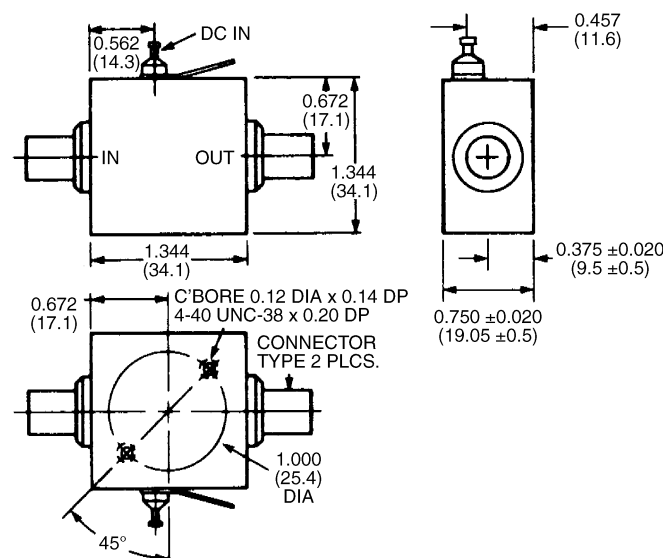
Model No.	Package
AM 183 PIN	TO-8-1
AMC-183 SMA	Connectorized

TO-8-1



Dimensions in () are in mm.
Unless Otherwise Noted: .xxx = ±0.010 (.xx = ±0.25)
.xx = ±0.02 (.x = ±0.5)
WEIGHT (APPROX.): 0.10 OUNCES 2.8 GRAMS

C-32



Dimensions in () are in mm.
Unless Otherwise Noted: .xxx = ±0.010 (.xx = ±0.25)
.xx = ±0.02 (.x = ±0.5)
WEIGHT (APPROX.): 1.62 OUNCES 46 GRAMS

Specifications Subject to Change Without Notice.

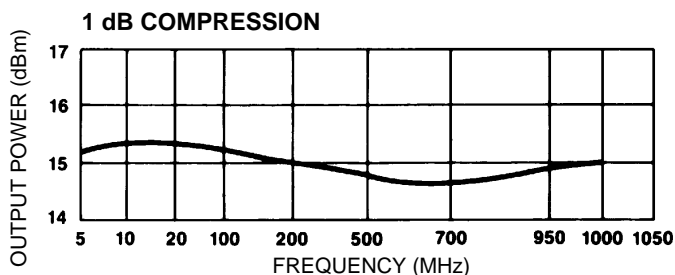
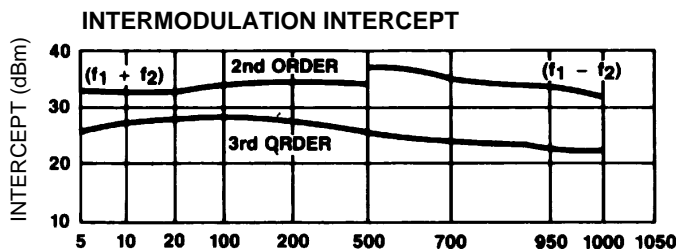
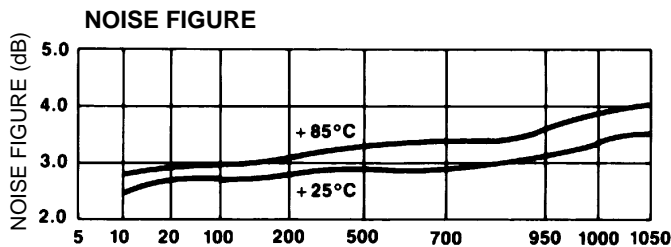
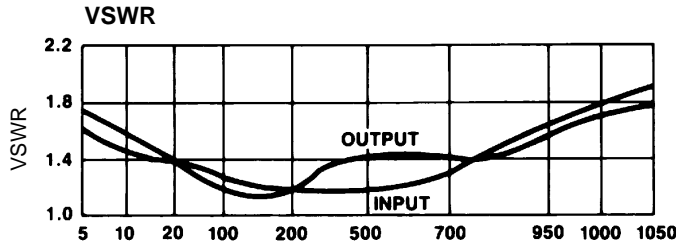
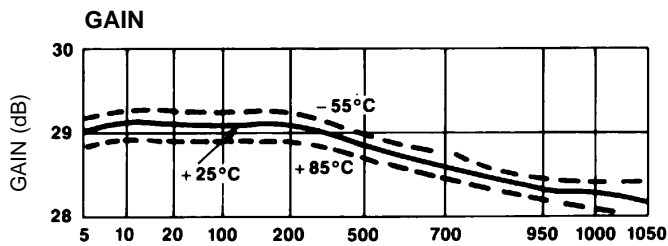
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Typical Performance



AM-183		S11		S21		S12		S22	
FREQUENCY		MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
5.0		0.14	-148.3	31.43	17.9	0.01	1.9	0.20	177.2
10.0		0.13	-170.1	32.36	6.3	0.01	1.6	0.12	92.7
20.0		0.13	-178.3	32.65	-2.6	0.01	1.3	0.09	69.8
50.0		0.12	-179.2	33.31	-13.6	0.01	-0.5	0.06	-72.9
100.0		0.11	-178.0	33.09	-29.3	0.01	-2.1	0.05	-98.1
250.0		0.12	-171.1	31.87	-71.9	0.01	-9.3	0.06	-123.4
500.0		0.12	-129.7	29.37	-144.8	0.01	-22.1	0.17	-153.9
750.0		0.14	-44.0	27.01	145.8	0.01	-45.8	0.25	178.1
1000.0		0.23	150.0	30.09	65.9	0.01	-97.1	0.28	80.0

FREQUENCY IN MHz

Specifications Subject to Change Without Notice.