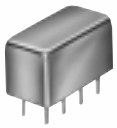
ATTENUATORS/SWITCHES 50 & 75Ω Plug-In

BI-PHASE 1 MHz to 2 GHz

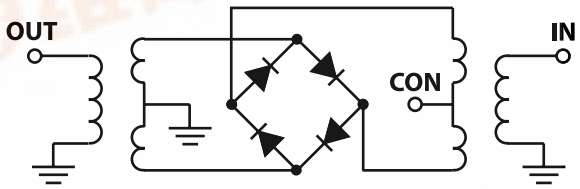
TFAS



PAS
GAS

MODEL NO.	FREQUENCY MHz IN f_L-f_U	CON	INSERTION LOSS dB (±20 mA) Mid-Band m Typ.	Mid-Band m Max.	Total Range Typ.	Total Range Max.	MAX. INPUT PWR dBm (±20 mA) 1 dB compr.	no damage	IN-OUT ISOLATION, dB (0 mA) L Typ.	L Min.	M Typ.	M Min.	U Typ.	U Min.	BI-PHASE $\overline{X}$ (±20 mA) Typ. Δ AMP (dB) m	Δ AMP (dB) Total Range	Phase(deg) deviation from 180° m	Phase(deg) deviation from 180° Total Range	CASE STYLE Note B	CONNECTION	PRICE $ Qty. (1-9)
PAS-1*	5-450	DC-0.05	3.5	4.0	3.5	4.7	20	29	65	50	45	35	35	25	0.1	0.1	0.5	1.2	A01	cf	33.95
PAS-2*	10-1000	DC-0.05	4.0	6.0	6.5	8.5	20	29	50	40	40	30	35	25	0.1	0.3	0.5	1.0	A01	cg	47.95
PAS-3*	1-200	DC-0.05	1.4	2.0	1.6	2.5	15	29	65	50	50	40	50	35	0.1	0.1	0.5	1.0	A01	cf	34.95
PAS-2000**	100-2000	DC-0.5	4.2	6.5	5.4	7.5	19R	25	30	22	—	—	26	20	0.3	0.4	5.0	8.0	A05	ch	24.95
❑ TFAS-1*	2-400	DC-0.05	1.4	2.0	1.6	3.0	20<	25	65	45	45	33	35	25	0.1	0.1	1.0	2.0	B02	cm	13.95
❑ TFAS-2**	10-1000	DC-0.5	3.7	4.5	5.0	8.0	17O	25	50	30	42	20	31	20	0.1	0.2	2.0	3.0	B02	cm	17.95
❑ GAS-1**	5-450	DC-0.05	3.3	4	3.5	5.0	20	25	60	48	45	35	35	25	0.10	0.1	1.0	1.5	A05	cf	13.95
❑ GAS-2**	10-1000	DC-0.05	4.3	6	5.2	8.5	20	25	55	40	35	25	28	20	0.10	0.3	1.5	3.0	A05	cg	15.95

L = low range [f_L to 10 f_L] M = mid range [10f_L to f_U/2] U = upper range [f_U/2 to f_U]
m = mid band [2f_L to f_U/2]



NOTES:
* Recommended for electronic attenuator
** Recommended for bi-phase modulator
■ Denotes 75 Ohm model.
❑ Non-hermetic
✲ +15 dBm from 100-800 MHz
✣ +15 dBm from 2-10 MHz
★ +13 dBm from 10-500 MHz
A. General Quality Control Procedures, Environmental Specifications, Hi-Rel and MIL description are given in General Information (Section 0).
B. Connector types and case mounted options, case finishes are given in section 0, see "Case styles & Outline Drawings".
C. Prices and specifications subject to change without notice.
1. Absolute maximum power, voltage and current ratings:
1a. Control current, 30mA
1b. Max. Power at room temperature
2. Performance specifications apply for input power up to 10 dB below stated 1dB compression;
example: +5dBm in 2-10MHz range for TFAS-1, TFAS-1SM

020710


TFAS-SM


SYAS


RAS

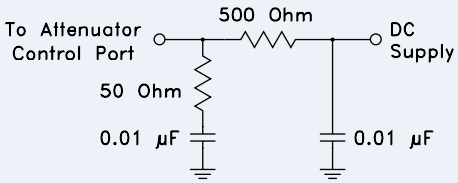

LRAS

MODEL NO.	FREQUENCY MHz IN f_L-f_U	CON	INSERTION LOSS dB (±20 mA) Mid-Band m Typ.	Mid-Band m Max.	Total Range Typ.	Total Range Max.	MAX. INPUT PWR dBm (±20 mA) 1 dB compr.	no damage	IN-OUT ISOLATION, dB (0 mA) L Typ.	L Min.	M Typ.	M Min.	U Typ.	U Min.	BI-PHASE $\overline{X}$ (±20 mA) Typ. Δ AMP (dB) m	Δ AMP (dB) Total Range	Phase(deg) deviation from 180° m	Phase(deg) deviation from 180° Total Range	CASE STYLE Note B	CONNECTION	PRICE $ Qty. (1-9)
TFAS-1SM*	2-400	DC-0.05	1.4	2.0	1.6	3.0	20✣	25	65	45	45	33	35	25	0.1	0.1	1.0	2.0	NNN150	cm	13.95
TFAS-2SM**	10-1000	DC-0.5	3.7	4.5	5.0	8.0	17★	25	50	30	42	20	31	20	0.1	0.2	2.0	3.0	NNN150	cm	17.95
SYAS-1*	2-400	DC-0.05	1.4	2.0	1.6	3.0	20✣	25	65	45	45	33	35	25	0.1	0.1	1.0	2.0	TTT167	ck	9.95
SYAS-2**	10-1000	DC-0.05	4.0	6.0	4.5	7.0	17★	25	59	40	42	28	28	20	0.1	0.3	2.0	3.0	TTT167	ck	13.95
SYAS-860**	600-1000	DC-0.5	—	—	2.7	5.7	14	25	25	(typ.)	18	(min.)			—	0.5	—	4.0	TTT166	ck	15.95
RAS-1**	2-400	DC-0.05	1.4	2.4	1.6	3.2	20R	25	65	45	45	28	32	22	0.10	0.1	1.0	2.0	TT241	ge	7.95
■ RAS-2-75**	10-1000	DC-0.05	4.1	6.0	4.5	7.5	20	25	58	40	42	28	39	20	0.15	0.3	1.5	3.0	TT240	cj	9.95
■ LRAS-2-75**	10-1000	DC-0.05	4.1	6.0	4.5	7.5	20	25	58	40	42	28	39	20	0.15	0.3	1.5	3.0	QQQ130	cj	9.95

L = low range [f_L to 10 f_L] M = mid range [10f_L to f_U/2] U = upper range [f_U/2 to f_U]

m = mid band [2f_L to f_U/2]

suggested control port biasing configuration



pin and coaxial connections

see case style outline drawings for pin locations

PORT	cf	cg	ch	cj	ck	cm	ge
INPUT	1	1	1	4	1	1	4
OUTPUT	8	8	8	1	2	4	1
CONTROL	3,4 ^	3,4 ^	3	5	3	2	5
GND EXT.	2,5,6,7	2,5,6,7	2,5,6,7	2,3,6	4,5,6	3	2,3,6
CASE GND	2	2,5,6,7	2,5,6,7	—	—	3	—
NOT USED	—	—	4	—	—	—	—

^ Pins must be connected together externally.

NSN GUIDE

MCL NO.	NSN
PAS-1	5985-01-282-2105
PAS-2	5985-01-192-0100
PAS-3	5895-01-067-3035

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