

Voltage Variable Attenuator

10 to 2500 MHz

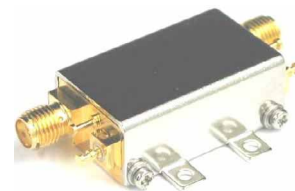
ZX73-2500

Features

- Broadband, 10-2500 MHz
- IP3, +43 dBm typ.
- 40 dB attenuation @ 1500 MHz
- Good VSWR at in /out ports over attenuation range
- No external bias and RF matching network required
- Shielded case
- Protected by US Patent 6,790,049

Applications

- Variable gain amplifier
- Power level control
- Feed-forward amplifiers
- ALC circuits



FEMALE SMA shown

CASE STYLE: GD958

SMA Connectors	Model	Price	Qty.
INPUT OUTPUT			
FEMALE FEMALE	ZX73-2500-S	\$49.95	(1-9)
MALE FEMALE	ZX73-2500M-S	\$49.95	(1-9)

Electrical Specifications @ 25°C

MODEL NO.	FREQ. (MHz)		INSERTION LOSS (dB)		ATTENUATION (dB)		IP3 (dBm)	RETURN LOSS ¹ (dBm)	POWER SUPPLY		CONTROL		CASE STYLE
	Min.	Max.	Typ.	Max.	Typ.	Min.			Voltage (V)	Current (mA)	Voltage (V)	Current (mA)	
ZX73-2500	10	500	3.0	4.6	55	41	43	20	+3 to +5	5	0-17	30	GD958
	500	1500	3.3	5.0	40	30	43	20	+3 to +5	5	0-17	30	
	1500	2500	4.0	6.2	37	25	44	20	+3 to +5	5	0-17	30	

Rise/fall time: 2.4 μ s typ.

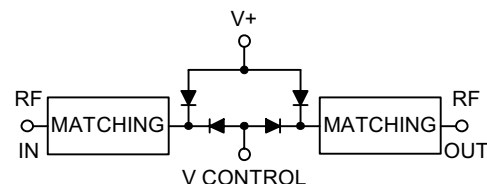
Switching Time, turn on/off: 3 μ s typ.

¹ Improved R. Loss in/out performance can be achieved at certain frequencies by choosing a V+ between +3V to +5V

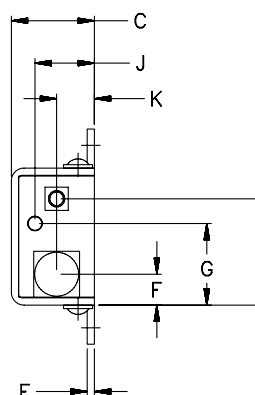
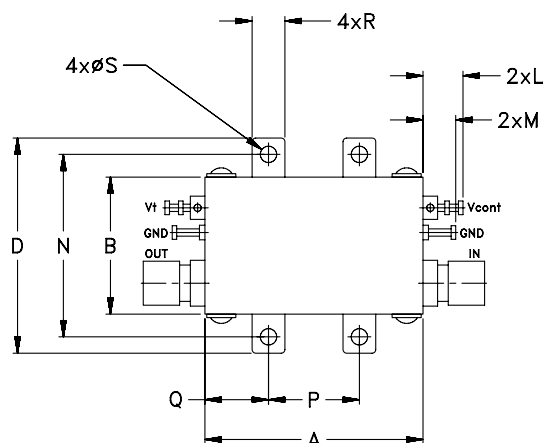
Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 85°C
Absolute Max. Supply Voltage (V+)	12V
Absolute Max. Tuning Voltage (Vctrl)	20V
Absolute Max. RF input level	100mW

Equivalent schematic



Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	wt.
1.20	.75	.46	1.18	.04	.17	.45	.59	.33	.21	.22	.18	1.00	0.50	.35	.18	.09	grams
30.50	19.1	11.6	30.0	1.0	4.3	11.4	14.9	8.3	5.3	5.6	4.6	25.4	12.7	8.9	4.6	2.3	35.0



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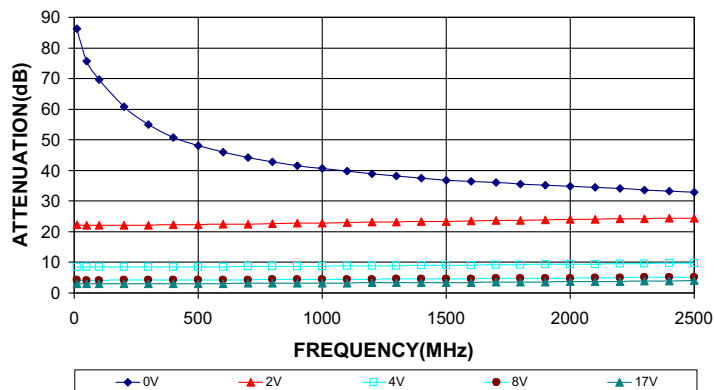
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REV. A
M100482
EDR-7796
ZX73-2500
RAV/TD/CP
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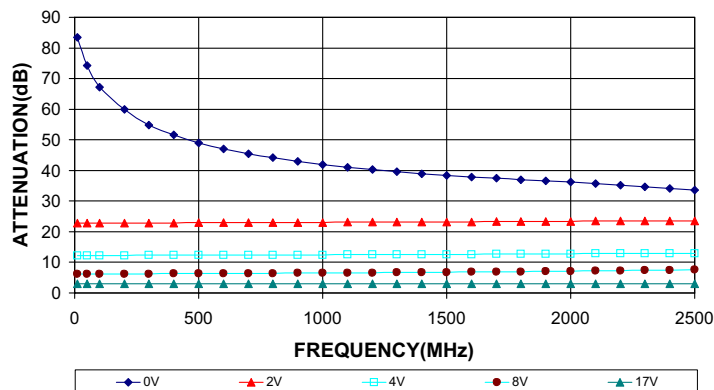
Performance Curves

ZX73-2500

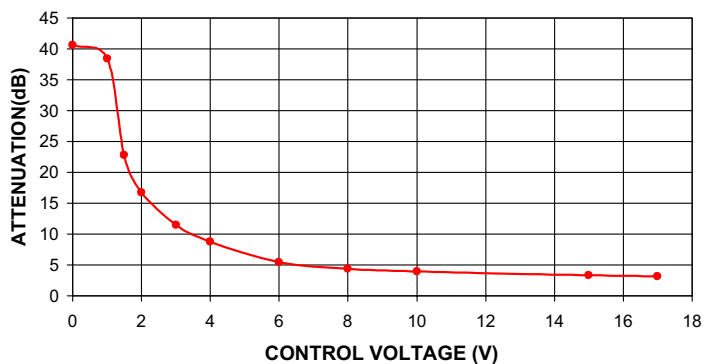
ZX73-2500
ATTENUATION Vs. FREQUENCY
Vs. CONTROL VOLTAGE @ $V_+ = 3V$



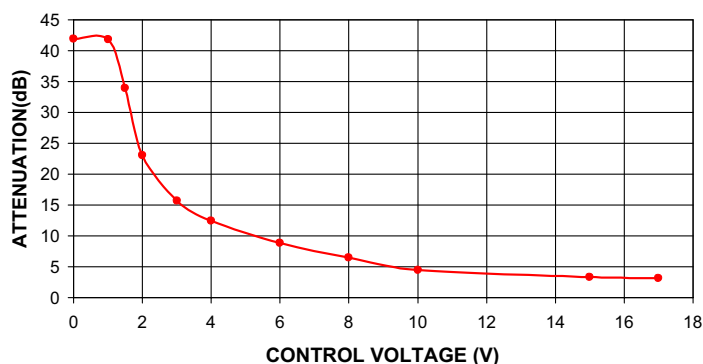
ZX73-2500
ATTENUATION Vs. FREQUENCY
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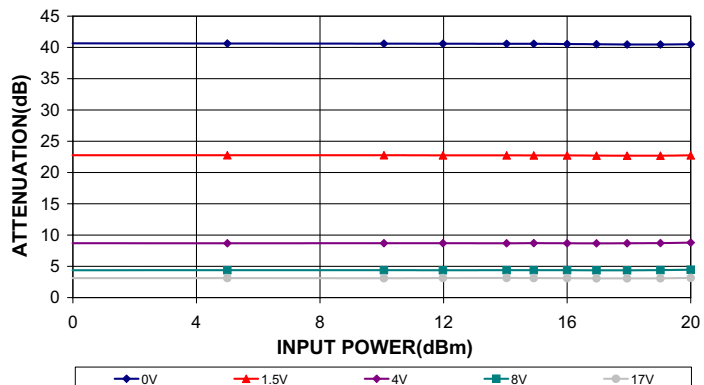
ZX73-2500
TYPICAL ATTENUATION AT 1000MHz @ $V_+ = 3V$



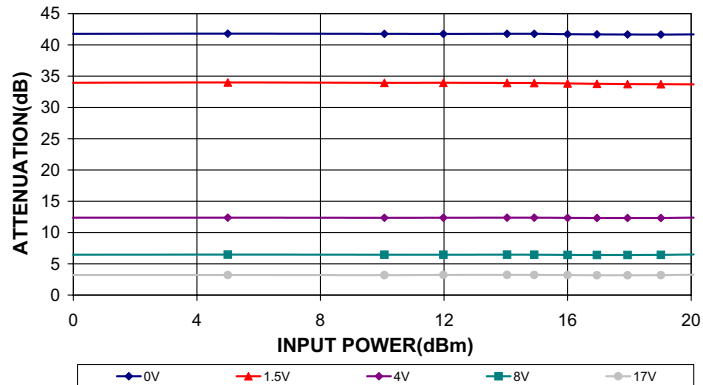
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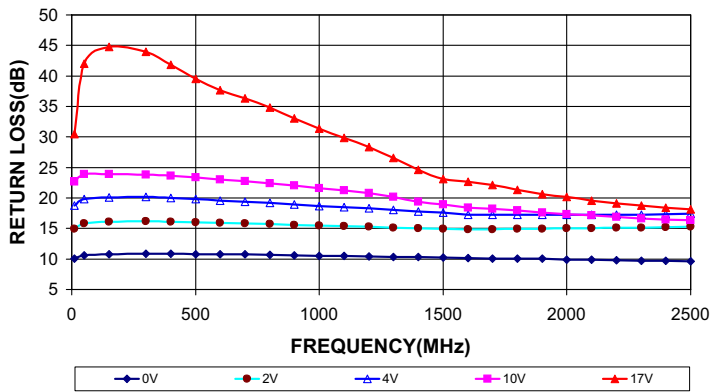
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ATTENUATION Vs. INPUT POWER
Vs. CONTROL VOLTAGE AT 1000MHz @ $V_+ = 3V$



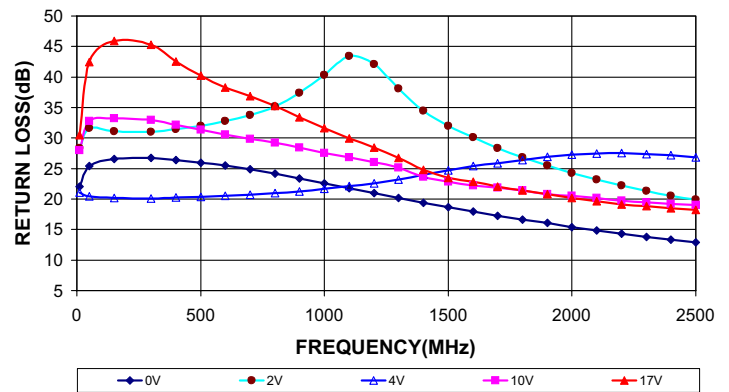
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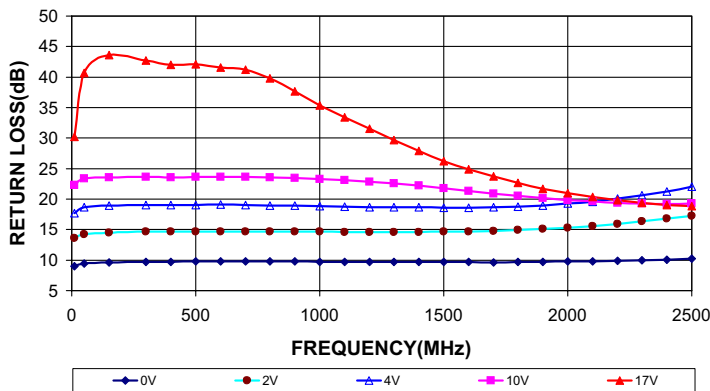
ZX73-2500
INPUT RETURN LOSS Vs. FREQUENCY
Vs. CONTROL VOLTAGE @ V+=3V



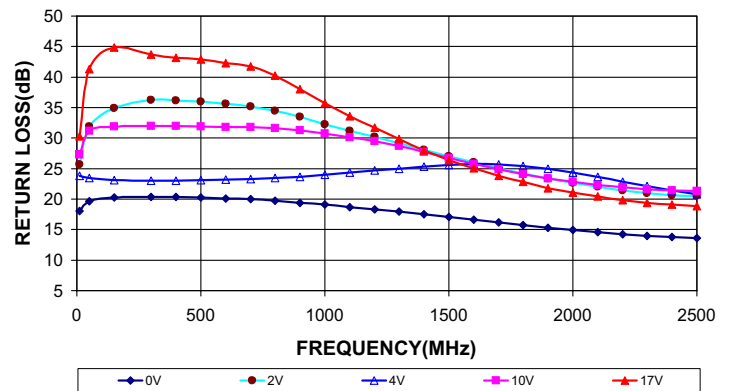
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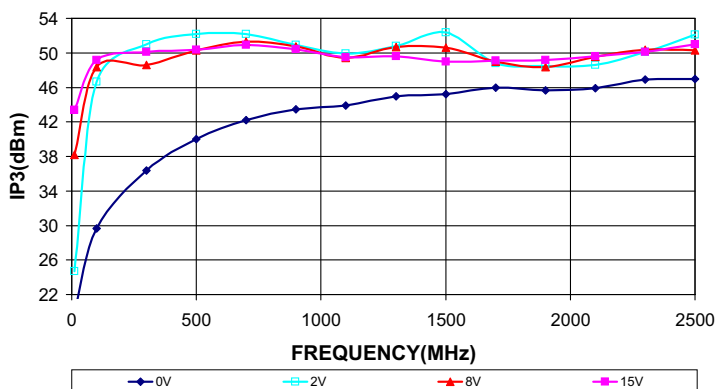
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IP3 Vs. FREQUENCY
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ZX73-2500
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