Surface Mount

Voltage Variable Attenuator

EVA-23-75+

75Ω, 10 to 2000 MHz

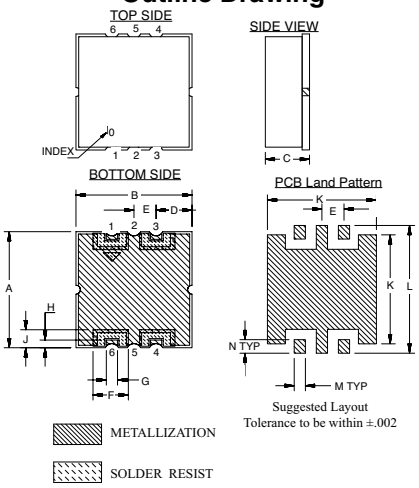
Maximum Ratings

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage(V+)	6V
Absolute Max. Control Voltage(Vctrl)	10V
Absolute Max. RF Input Level	+22dBm

Pin Connections

RF IN	1
RF OUT	6
V CONTROL	3
V+	4
GROUND	2,5

Outline Drawing

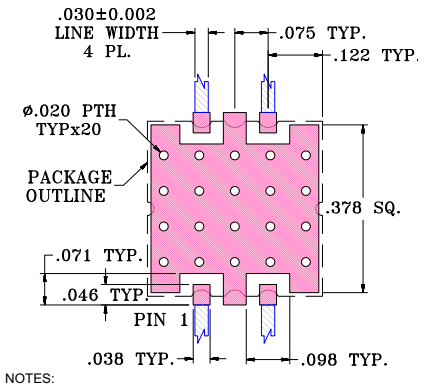


Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
.394	.394	.150	.122	.075	.120	.038
10.01	10.01	3.81	3.10	1.90	3.05	0.97

H	J	K	L	M	N	wt.
.026	.061	.370	.434	.038	.046	grams
0.66	1.55	9.40	11.02	0.97	1.17	0.7

Demo Board MCL P/N: TB-381
Suggested PCB Layout (PL-238)



NOTES:
1. TRACE WIDTH IS SHOWN FOR R04350 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.

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

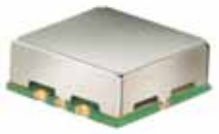
DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Features

- Frequency range, 10-2000 MHz
- High IP3, 50 dBm typ.
- Maximum attenuation at minimum current
- No external bias and RF matching network required
- Small size, shielded case
- Aqueous washable

Applications

- CATV
- Variable gain amplifiers
- Feed forward amplifiers
- ALC circuits



CASE STYLE: HE1135
PRICE: $10.95 ea. QTY (10-49)

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

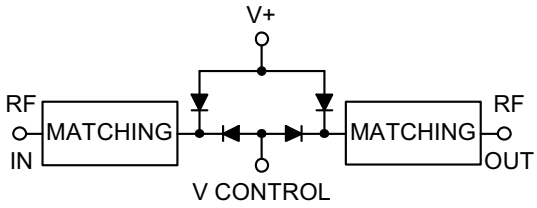
The +suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications (T_{AMB}= 25°C)

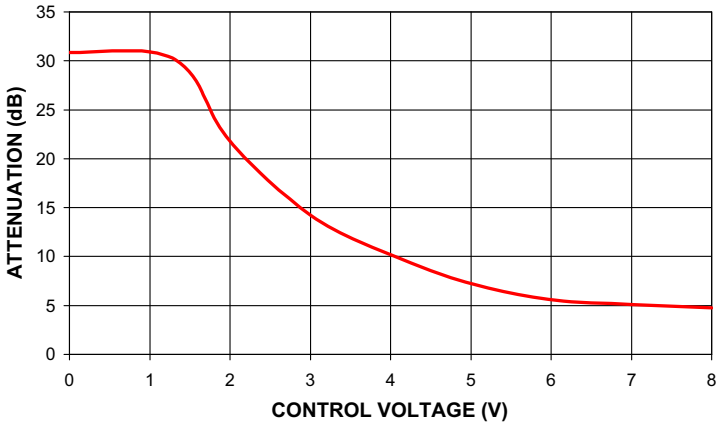
FREQ. (MHz)	MIN. INSERTION LOSS, dB (+8V)		MAX. ATTENUATION dB (0V)		INPUT POWER (dBm)	CONTROL Voltage (V)	CONTROL Current (mA)	IP3 (dBm)	RETURN LOSS (dB)	POWER SUPPLY Voltage (V)	POWER SUPPLY Current (mA)
Min. Max.	Typ.	Max.	Typ.	Min.	Max.		Max.	Typ.	Typ.		Max.
10 - 1000	4.5	5.5	40	25	+22	0 - 8	15	48	19	+3	4
1000 - 2000	5.0	6.0	27	18	+22	0 - 8	15	52	14	+3	4

Notes:
Rise/Fall time: 15μSec Typ.
Switching Time, turn on/off: 20μSec. Typ.

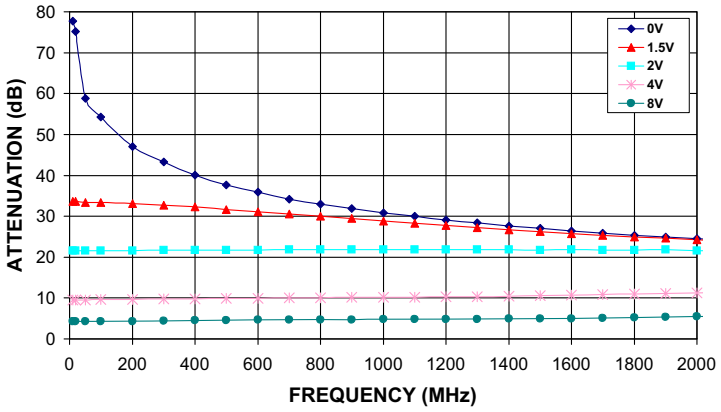
Equivalent Schematic



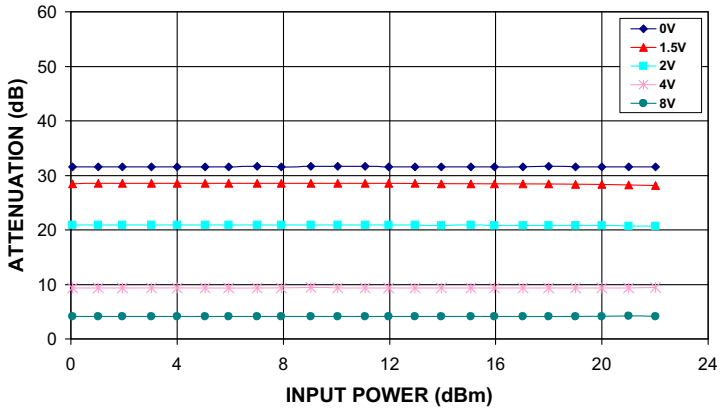
EVA-23-75+
TYPICAL ATTENUATION AT 1000 MHz



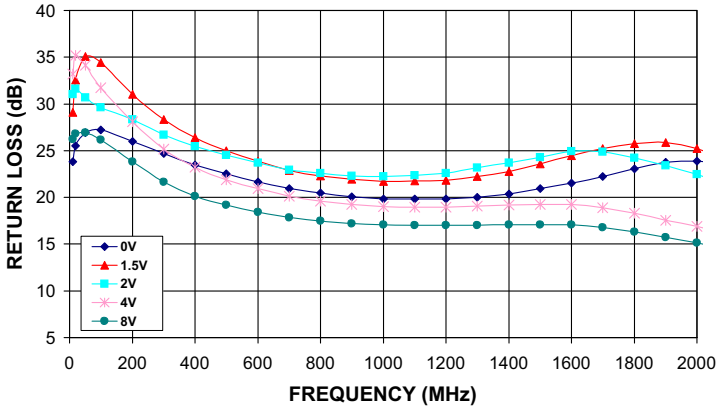
EVA-23-75+
ATTENUATION Vs. FREQUENCY
OVER CONTROL VOLTAGES



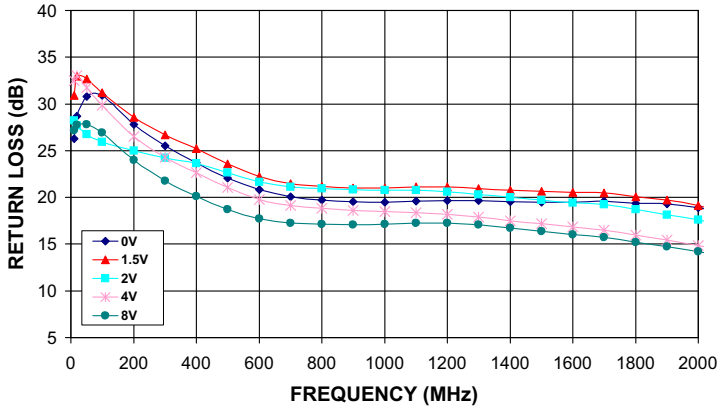
EVA-23-75+
ATTENUATION Vs. INPUT POWER
OVER CONTROL VOLTAGES AT 1000MHz



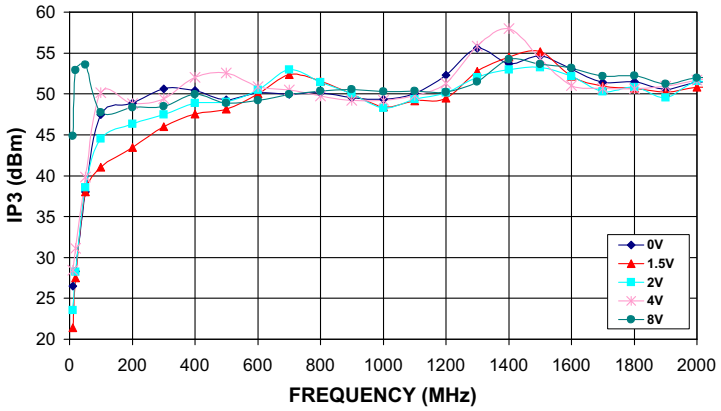
EVA-23-75+
INPUT RETURN LOSS Vs. FREQUENCY
OVER CONTROL VOLTAGES



EVA-23-75+
OUTPUT RETURN LOSS Vs. FREQUENCY
OVER CONTROL VOLTAGES



EVA-23-75+
IP3 Vs. FREQUENCY
OVER CONTROL VOLTAGES



EVA-23-75+
PHASE SHIFT Vs. FREQUENCY
OVER CONTROL VOLTAGES