

### TO-8 Thin-Film Linearizer For The G30

Rev. V2

#### **Features**

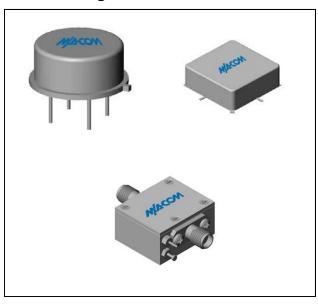
- AVAILABLE IN SURFACE MOUNT
- WIDE TEMPERATURE OPERATION
- YIELDS LINEAR ATTENUATION (dB) FOR LINEAR CONTROL VOLTAGE

### **Ordering Information**

Part Number	Package	
LG30	TO-8	
MAHY-008743-SMLG30	Surface Mount	
MAHY-008743-0CLG30	SMA Connectorized **	

<sup>\*\*</sup> The connectorized version is not RoHs compliant.

# **Product Image**



# Linearity Specifications: Frequency: 100 - 2000 MHz, attenuation range: 3 to 25 dB

Temperature	Units	Typical	Guaranteed Max.
25°C	dB	±1.0	±1.5
-54°C to +85°C	dB	< ±1.5	±2.0

# **Typical Current Drain**

	Units	Control Voltage= 0 V (Min. Attenuation)`	Control Voltage= 15 V (Max. Attenuation)
V- V+ V <sub>CON</sub>	mA mA mA	3 5 6	15 14 12
Combination of LG30 Plus G30 V- V+ V <sub>CON</sub>	mA mA mA	3 12 6	15 21 12

typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

India Tel: +91.80.43537383
China Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

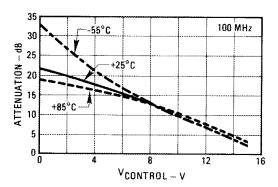


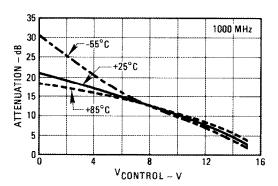
### TO-8 Thin-Film Linearizer For The G30

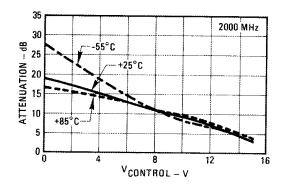
Rev. V2

### **Typical Performance Curves**

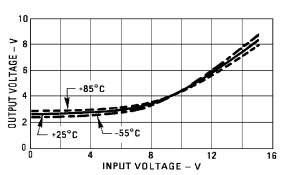
# Attenuation vs. V<sub>Control</sub>







# V<sub>Out</sub> vs. V<sub>Control</sub>



• North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400 • India Tel: +91.80.43537383 • China Tel: +86.21.2407.1588



### TO-8 Thin-Film Linearizer For The G30

Rev. V2

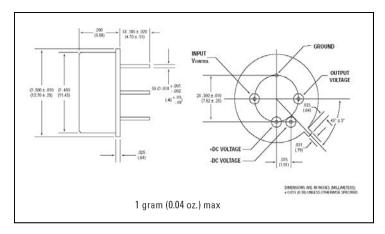
### **Absolute Maximum Ratings**

Parameter	Absolute Maximum	
Storage Temperature	-62°C to +125°C	
Maximum Case Temperature	125°C	
Maximum DC Voltage	+17 Volts	
"S" Series Burn-in Temperature (Case)	125°C	

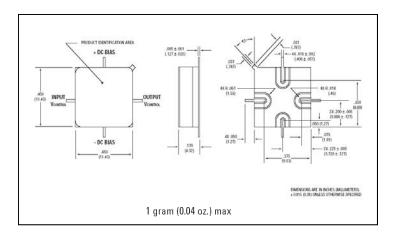
In the G30 module is a voltage controlled voltage source. The LG30 is designed to drive the G30, a voltage controlled attenuator module. The combination of the LG30 and the G30 modules has a typical attenuation characteristic which is linear with control voltage provided the following conditions are met:

- 1. Positive supply =  $15V \pm 1\%$
- 2. Negative supply =  $-15V \pm 1\%$
- Source resistance of variable supply  $\leq 1 \Omega$ The LG30 has a response time of 2 µs over its entire band of control voltage. The response time of the G30 is typically 0.2 µs.

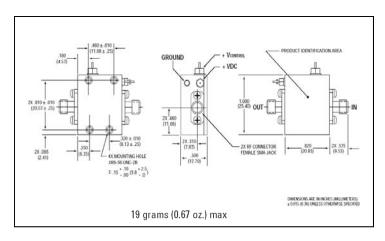
### **Outline Drawing: TO-8**



# **Outline Drawing: Surface Mount**



# **Outline Drawing: SMA Connectorized**



- India Tel: +91.80.43537383
- China Tel: +86.21.2407.1588