

# High-Power CW Amplifier

## DM-HPKA-10-102



Specifications are subject to change without notice

### Electrical Specifications (+25°C)

Parameter	Value
Frequency	29 to 31 GHz
Small Signal Gain	50 dB min
Gain Var. OverTemp	-0.05 dB/°C typical
Psat @ -5dBm Input	40 dBm min
Psat @ -5dBm Input	12 W typical
P1dB	38 dBm min
Noise Figure	8 dB max
DC Power	20 VDC, 3.6 A nom at Psat
PAE	15 % typical
VSWR (Input/Output)	2.0:1/1.5:1 nom
Harmonics	-15 dBc typical @ Psat
Spurious	-70 dBc typical
Input Power Handling	15 dBm max
Mismatch Handling	5.0:1 max
Operation	CW
AM-PM Conversion	3°/dB up to 38dBm max

### Mechanical Specifications

Parameter	Value
Size (L x W x H)	3.1" x 3.0" x 0.78"
Connectors (In/Out)	K (f)/K (f)
Sealing	Hermetic
Finish	Grey Paint, Mounting surface Ni finish
Marking	Black per MIL-STD-130
Cooling	External heatsink

### Features

Parameter	Value
DC On/Off	1µs; TTL Logic-Low "0V": ON;
High "5V": OFF	at +90°C
OverTemp Shutdown	at +90°C
Current Monitoring	Included

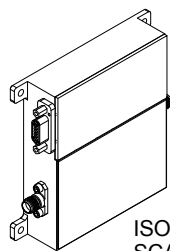
### Environmental Specifications (by design)

Parameter	Value
Operating Temperature	-40 to +85°C
Storage Temperature	-54 to +85°C
Relative Humidity	IAW MIL-STD-810F, up to 95%
Altitude	Aup to 30,000 ft
Vibration	MIL-STD-810F, method 514.5, Categories 12, 14, 20, Categories 12, 13, 14, 20
Shock	MIL-STD-202G method 214, condition C
condition C	MIL-STD- 810G method 509.5, 5%, 35C 96 hrs
Salt Fog	MIL-STD-810G method 508.6
Fungus	MIL-STD-810G method 508.6

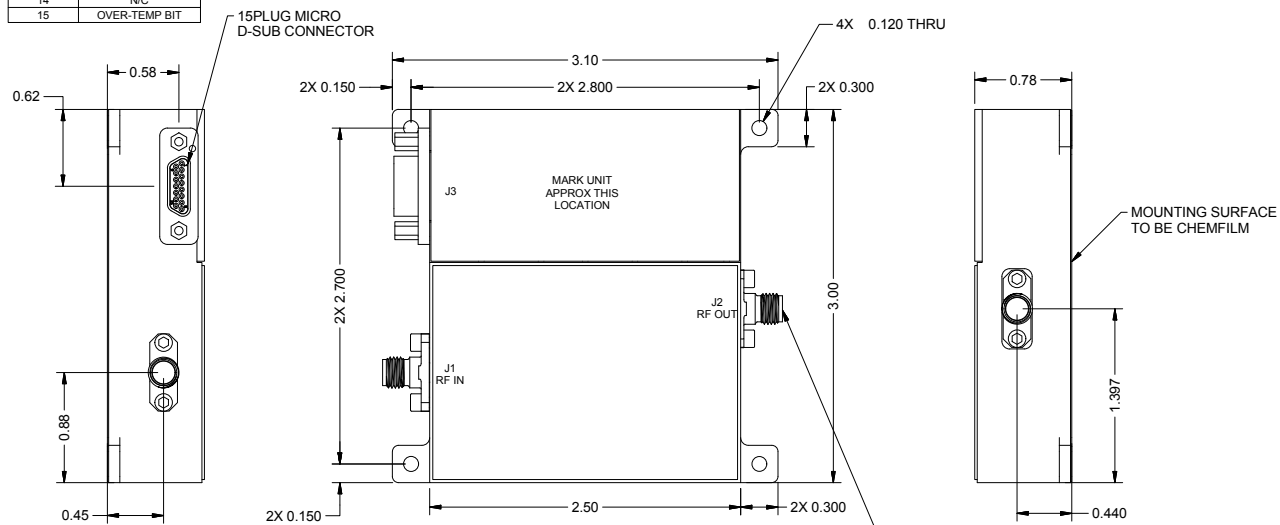


Outline Drawing

J3 CONNECTOR PIN OUT	
PIN #	DESCRIPTION
1	+20V
2	+20V
3	GND
4	GND
5	N/C
6	N/C
7	OVER-CURRENT BIT
8	BLANKING TTL
9	+20V
10	+20V
11	GND
12	GND
13	N/C
14	N/C
15	OVER-TEMP BIT



ISO VIEW  
SCALE 1 : 1



All dimensions are in inches

Need More Help? Need a Variant of This Product?

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