

# STL 400 SERIES HIGH POWER LIMITERS

## TECHNICAL FEATURE

### FEATURES

- EW and Commercial Applications
- 2 – 100 Watt Power Handling Capability
- Low Insertion Loss
- Low VSWR
- Coaxial Design
- Drop-in Design
- Replaceable Connectors
- Reliability Screening



### DESCRIPTION/APPLICATIONS

Crane provides the Model STL400 Series passive high power limiters for the protection of microwave circuits and receivers. All models are available in both hermetically sealed coaxial and drop-in packages. A unique design approach offers wideband performance and high reliability in a compact package.

### DESCRIPTION/APPLICATIONS

The STL400 Series provides a higher limiting threshold and faster recovery characteristics as well as higher isolation (lower leakage) with higher power handling.

Crane is qualified as a MIL-I-45208 Quality Systems facility by the DOD and lending foreign and domestic military OEM's. MIL-STD-883 screening is available in-house at additional cost.

### PERFORMANCE @ 25°C

Model	Frequency (GHz)	Insertion <sup>1</sup> Loss (dB) Max.	VSWR <sup>1</sup> Max.	Limiting Threshold (dBm) Typ.	Flat Leakage (dBm) Max.	Max. Power Handling CW Power (Watts)	Max. Power Handling, Peak Power (Watts) 1μsec, .001 DC	Recovery Time (nsec) max.	Outlines Available
STL410	.350-500	0.5	2.0:1	5	20	2	200	100	R, A5, B3
STL411	2.0-4.0	1	2.0:1	5	17	10	200	150	R, A5, B3
STL412	4.0-8.0	1.8	2.0:1	7	17	20	500	100	R, A5, B3
STL413	8.0-16.0	2.4	2.0:1	10	17	30	500	200	R, A5, B3
STL418	8.0-16.0	2.6	2.0:1	20	30	30	500	200	R, A5, B3
STL450	.5-1.5	1.8	2.0:1	6	19	100	1000	10,000	R, A5

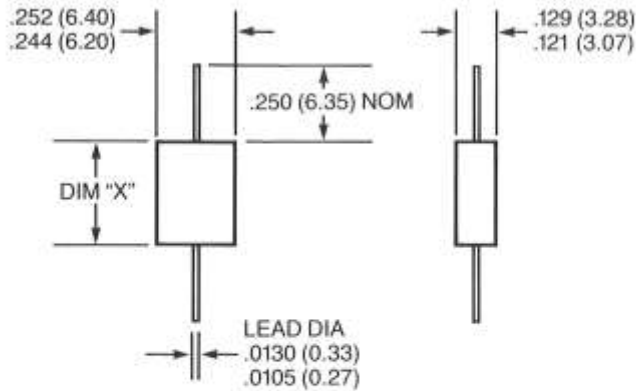
#### Notes:

1. Measured at 0 dBm.
2. All conditions at +25°C. Incident power linearity derate over temperature up to +150° C.
3. Operating temperature: -54°C to +85°C.
4. Crane uses an HP8510 ANA and can provide phase matched limiters at any fixed frequency and temperature to ±10°.

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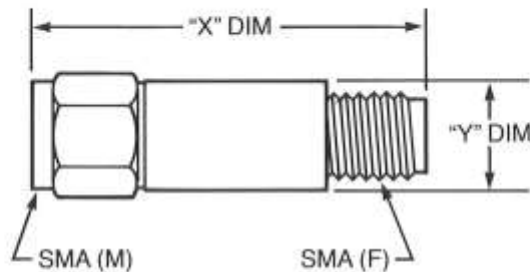
## OUTLINE DRAWING

### Case Style "A"



DASH NO.	DIM "X"—INCHES/MILLIMETER			
	MINIMUM		MAXIMUM	
	IN	MM	IN	MM
A4	.327	8.31	.333	8.46
A5	.527	13.39	.533	13.54

### Case Style "B"



DASH NO.	DIM "X"—INCHES/MILLIMETER				DIM "Y"—INCHES/MILLIMETER			
	MINIMUM		MAXIMUM		MINIMUM		MAXIMUM	
	IN	MM	IN	MM	IN	MM	IN	MM
B1	1.01	25.65	1.05	26.67	.310	7.87	.335	8.51
B2	1.14	28.96	1.18	29.97	.310	7.87	.335	8.51
B3	1.29	32.77	1.33	33.78	.310	7.87	.335	8.51