

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

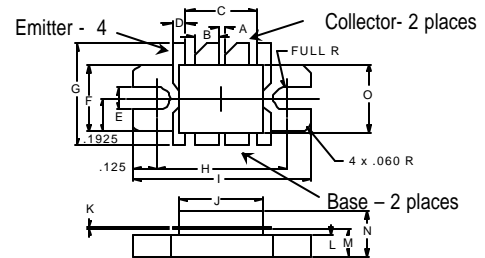
The **UML125B** is Designed for Class A, B and C Power Amplifiers Operating in the 100 to 500 MHz Military Band.

FEATURES:

- $P_G = 7.0$ dB Min. at 125 W/400 MHz
- Input Matching Networks
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	15 A
V_{CB0}	60 V
V_{CEO}	33 V
V_{EBO}	4.0 V
P_{DISS}	260 W @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+200^\circ C$
T_{STG}	$-65^\circ C$ to $+150^\circ C$
θ_{JC}	$0.67^\circ C/W$

PACKAGE STYLE .400 8L FLG


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A		.030 / 0.76
B	.115 / 2.92	.125 / 3.18
C		.360 / 9.14
D	.065 / 1.65	.075 / 1.91
E		.130 / 3.30
F	.380 / 9.65	.390 / 9.91
G	.735 / 18.67	.765 / 19.43
H	.645 / 16.38	.655 / 16.64
I	.895 / 22.73	.905 / 22.99
J	.420 / 10.67	.430 / 10.92
K	.003 / 0.08	.007 / 0.18
L	.120 / 3.05	.130 / 3.30
M	.159 / 4.04	.175 / 4.45
N		.280 / 7.11
O	.395 / 10.03	.405 / 10.29

ORDER CODE: ASI10699
CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CB0}	$I_C = 100$ mA			60	---	---	V
BV_{CES}	$I_C = 80$ mA			60	---	---	V
BV_{CEO}	$I_C = 50$ mA			33	---	---	V
BV_{EBO}	$I_E = 20$ mA			4.0	---	---	V
I_{CB0}	$V_{CB} = 30$ V				---	10	mA
h_{FE}	$V_{CE} = 5.0$ V	$I_C = 1.0$ A		20	---	---	---
G_P	$V_{CE} = 28$ V	$P_{OUT} = 125$ W	$f = 400$ MHz	7.0			dB
η_C				60			%
G_P	$V_{CE} = 28$ V	$P_{OUT} = 100$ W	$f = 500$ MHz	5.5			dB
η_C				55			%