

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI UML1T** is Designed for High Power Class C Amplifier in, 225 to 400 MHz Military Communication Equipment.

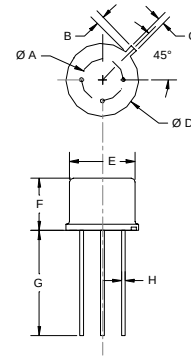
FEATURES:

- Class C Operation
- $P_G = 10 \text{ dB}$ at 1.0 W/400 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	0.4 A
V_{CBO}	55 V
V_{CEO}	30 V
V_{EBO}	3.5 V
P_{DISS}	5.0 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+200^\circ\text{C}$
θ_{JC}	35.0°C/W

PACKAGE STYLE TO-39



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A		.200 / 5.080
B	.029 / 0.740	.045 / 1.140
C	.028 / 0.720	.034 / 0.860
D	.335 / 8.510	.370 / 9.370
E	.305 / 7.750	.335 / 8.500
F	.240 / 6.100	.260 / 6.600
G		.500 / 12.700
H	.016 / 0.407	.020 / 0.508

ORDER CODE: ASI10690

CHARACTERISTICS $T_C = 25^\circ\text{C}$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 5 \text{ mA}$	30			V
BV_{CER}	$I_C = 5 \text{ mA}$ $R_{BE} = 10 \Omega$	55			V
BV_{CBO}	$I_C = 0.1 \text{ mA}$	55			V
BV_{EBO}	$I_E = 0.1 \text{ mA}$	3.5			V
I_{CEO}	$V_{CE} = 28 \text{ V}$			20	μA
I_{CEX}	$V_C = 55 \text{ V}$ $V_{BE} = -1.5 \text{ V}$			100	μA
h_{FE}	$V_{CE} = 5.0 \text{ V}$ $I_C = 50 \text{ mA}$ $I_C = 360 \text{ mA}$	10 5		200 ---	---
C_{OB}	$V_{CB} = 28 \text{ V}$ $f = 1.0 \text{ MHz}$			5.0	pF
P_{GE} η_D	$V_{CC} = 28 \text{ V}$ $P_{OUT} = 1.0 \text{ W}$ $f = 400 \text{ MHz}$	10	55		dB %