NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI ULBM5** is a gold metallized RF power transistor designed for 12.5 V, Class-C UHF communications applications. It utilizes emitter ballasting to achieve high reliability & ruggedness.

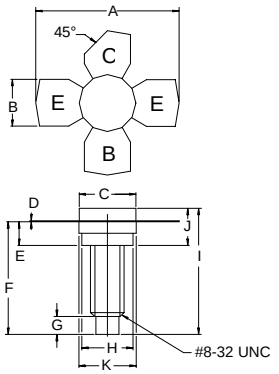
FEATURES:

- Common Emitter, 12.5 V operation
- $\mathbf{P_G}$ = 8.5 dB at 5.0 W/470 MHz
- ***Omnigold***™ Metalization System

MAXIMUM RATINGS

$\mathbf{I_C}$	2.0 A
$\mathbf{V_{CBO}}$	36 V
$\mathbf{V_{CER}}$	18 V
$\mathbf{V_{CES}}$	36 V
$\mathbf{V_{EBO}}$	4.0 V
$\mathbf{P_{DISS}}$	37 W @ T_C = 25 °C
$\mathbf{T_J}$	-65 °C to +200 °C
$\mathbf{T_{STG}}$	-65 °C to +150 °C
$\mathbf{\theta_{JC}}$	11.6 °C/W

PACKAGE STYLE .280 4L STUD



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	1.010 / 25.65	1.055 / 26.80
B	.220 / 5.59	.230 /5.84
C	.270 / 6.86	.285 / 7.24
D	.003 / 0.08	.007 / 0.18
E	.117 / 2.97	.137 / 3.48
F	.572 / 14.53	
G	.130 / 3.30	
H	.245 / 6.22	.255 / 6.48
I	.640 / 16.26	
J	.175 / 4.45	.217 / 5.51
K	.275 / 6.99	.285 / 7.24

ORDER CODE: ASI10680

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$\mathbf{BV_{CEO}}$	I_C = 50 mA	16			**V**
$\mathbf{BV_{CES}}$	I_C = 10 mA	36			**V**
$\mathbf{BV_{EBO}}$	I_E = 2.0 mA	4.0			**V**
$\mathbf{I_{CBO}}$	V_{CB} = 15 V			1.0	**mA**
$\mathbf{h_{FE}}$	V_{CE} = 5.0 V I_C = 200 mA	20	---	---	**---**

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
C_{ob}	V_{CB} = 12 V		f = 1.0 MHz	---	19	---	**pF**
P_G	V_{CC} = 12.5 V P_{OUT} = 5.0 W	P_{IN} = 0.70 W	f = 470 MHz	8.5			**dB**

IMPEDANCE DATA

FREQ	Z_{IN} (Ω)	Z_{CL} (Ω)
450	1.4 + j2.0	10.4 – j6.9
470	1.4 + j2.9	11.4 + j5.8
512	1.5 + j3.4	11.9 + j3.2