NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI ULBM10** is a gold metallized RF power transistor designed for 12.5 V, Class-C application in 450-512 MHz frequency range. It utilizes emitter ballasting for high reliability and ruggedness.

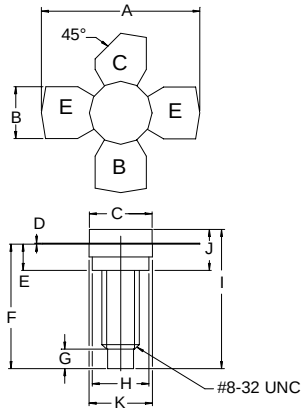
FEATURES:

- Common Emitter, Class-C 12.5 V
- $\mathbf{P_G}$ = 7.0 dB at 10 W/470 MHz
- ***Omnigold***™ Metalization System

MAXIMUM RATINGS

$\mathbf{I_C}$	2.5 A
$\mathbf{V_{CBO}}$	36 V
$\mathbf{V_{CEO}}$	16 V
$\mathbf{V_{CES}}$	36 V
$\mathbf{V_{EBO}}$	4.0 V
$\mathbf{P_{DISS}}$	58 W @ T_C = 25 °C
$\mathbf{T_J}$	-65 °C to +200 °C
$\mathbf{T_{STG}}$	-65 °C to +150 °C
$\mathbf{\theta_{JC}}$	3.0 °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: ASI10682

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$\mathbf{BV_{CEO}}$	I_C = 20 mA	16			**V**
$\mathbf{BV_{CES}}$	I_C = 25 mA	36			**V**
$\mathbf{BV_{EBO}}$	I_E = 10 mA	4.0			**V**
$\mathbf{I_{CEO}}$	V_{CB} = 15 V			2.0	**mA**
$\mathbf{I_{CES}}$	V_{CE} = 10 V			3.0	**mA**
$\mathbf{h_{FE}}$	V_{CE} = 5.0 V I_C = 1.0 A	10		150	**---**

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
C_{ob}	V_{CB} = 12.5 V		f = 1.0 MHz			26	pF
P_G	V_{CC} = 12.5 V	P_{OUT} = 10 W	f = 470 MHz	7.0			dB
η_C	P_{IN} = 2.0 W				60		%

IMPEDANCE DATA

FREQ	$Z_{IN}(\Omega)$	$Z_{CL}(\Omega)$
470 MHz	1.5 – j2.7	5.7 + j1.5

P_{IN} = 2.0 W
V_{CE} = 12.5 V