

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **UML25S** is Designed for Class C Amplifiers in 225 to 400 MHz Military Communication Equipment.

**FEATURES:**

- $P_G = 9.5$  dB Typical at 400 MHz
- Economical .280" Stud Package
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	3.0 A
$V_{CBO}$	60 V
$V_{CEO}$	30 V
$V_{EBO}$	3.5 V
$P_{DISS}$	45 W @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$\theta_{JC}$	$3.0^\circ\text{C/W}$

**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: ASI10694**

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CES}$	$I_C = 50$ mA	60			V
$BV_{CBO}$	$I_C = 50$ mA	60			V
$BV_{EBO}$	$I_E = 5$ mA	3.5			V
$I_{CBO}$	$V_{CB} = 30$ V			3.0	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 500$ mA	10		120	---
$C_{OB}$	$V_{CB} = 28$ V $f = 1.0$ MHz			30	pF
$P_G$ $\eta_D$	$V_{CC} = 28$ V $P_{OUT} = 25$ W $f = 400$ MHz	9.0	60		dB %