

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI UMIL20** is a Common Emitter Device Designed for Class A , AB and C Amplifier Applications in the 225 to 400 MHz Military Communications Band.

**FEATURES:**

- Direct Replacement for **MRF323**
- $P_G = 12$  dB Typical at 400 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	2.5 A
$V_{CB0}$	65 V
$P_{DISS}$	35 W @ $T_C = 25^\circ C$
$T_J$	$-65^\circ C$ to $+200^\circ C$
$T_{STG}$	$-65^\circ C$ to $+150^\circ C$
$q_{JC}$	$5.0^\circ C/W$

**PACKAGE STYLE .280 4L STUD**

	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	.5/2/14,53	
G	.130/3,30	
H	.275/6,99	.285/7,24
I	.640/16,26	
J	.175/4,45	.21/75,51

1 = Collector    2 = Base  
3 & 4 = Emitter

ORDER CODE: ASI10494

**CHARACTERISTICS**  $T_C = 25^\circ C$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CB0}$	$I_C = 20$ mA	65			V
$BV_{CER}$	$I_C = 20$ mA $R_{BE} = 200 \Omega$	33			V
$BV_{EBO}$	$I_E = 20$ mA	3.5			V
$I_{CB0}$	$V_{CB} = 30$ V			2.0	mA
$h_{FE}$	$V_{CE} = 5$ V $I_C = 1.0$ A	20		200	---
$C_{OB}$	$V_{CB} = 28$ V $f = 1.0$ MHz			20	pF
$P_G$	$V_{CE} = 28$ V $P_{OUT} = 20$ W $f = 400$ MHz	10	12		dB
$h_C$		50			%