

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

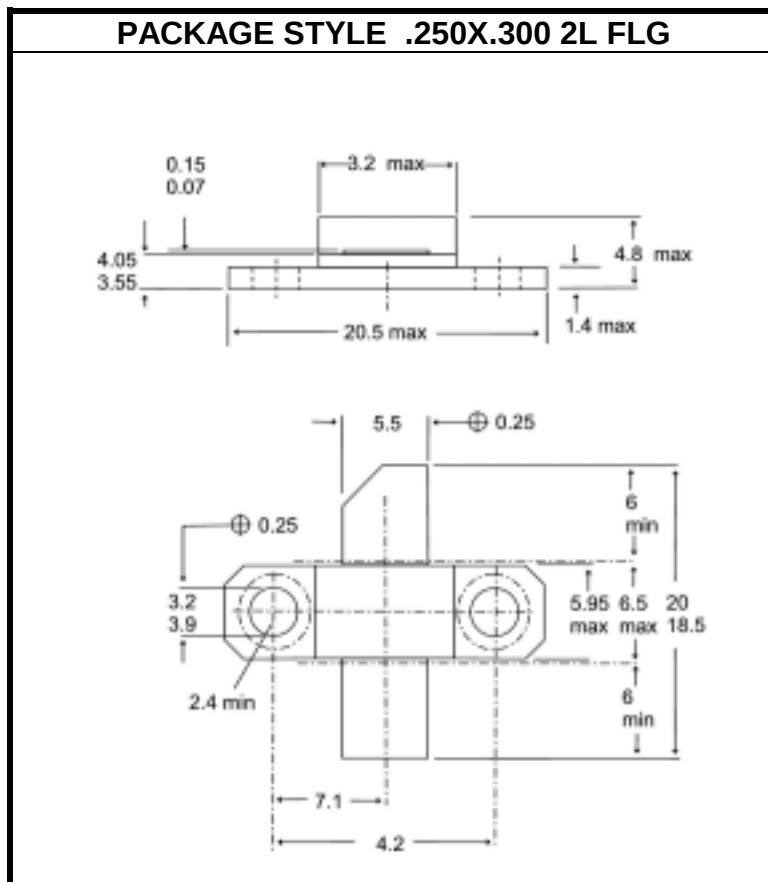
The **ASI MRW2020** is a high performance common base RF power transistor intended for 28V operation across the 1 to 2.3 GHz frequency range.

FEATURES:

- Gain: 5.2 dB Min. at 20 W
- Output Power: 20 W
- Diffused Ballast Resistors
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	4.0 A
V_{CES}	50 V
V_{EBO}	3.5 V
P_{DISS}	60 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}	3.0°C/W



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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 160\text{ mA}$			50	---	---	V
BV_{EBO}	$I_E = 2.0\text{ mA}$			3.5	---	---	V
I_{CBO}	$V_{CB} = 28\text{ V}$			---	---	2.0	A
h_{FE}	$V_{CE} = 5.0\text{ V}$	$I_C = 800\text{ mA}$		10	---	100	---
C_{ob}	$V_{CB} = 28\text{ V}$	$f = 1.0\text{ MHz}$		---	---	24	pF
G_{PB}	$V_{CC} = 28\text{ V}$	$P_{OUT} = 20\text{ W}$	$f = 2.0\text{ GHz}$	5.2	---	---	dB
η_C				40	---	---	%
Ψ	$V_{CC} = 28\text{ V}$ Load VSWR = $\infty:1$, All Phase Angles			$f = 2.0\text{ GHz}$ No Degradation in Output Power			