

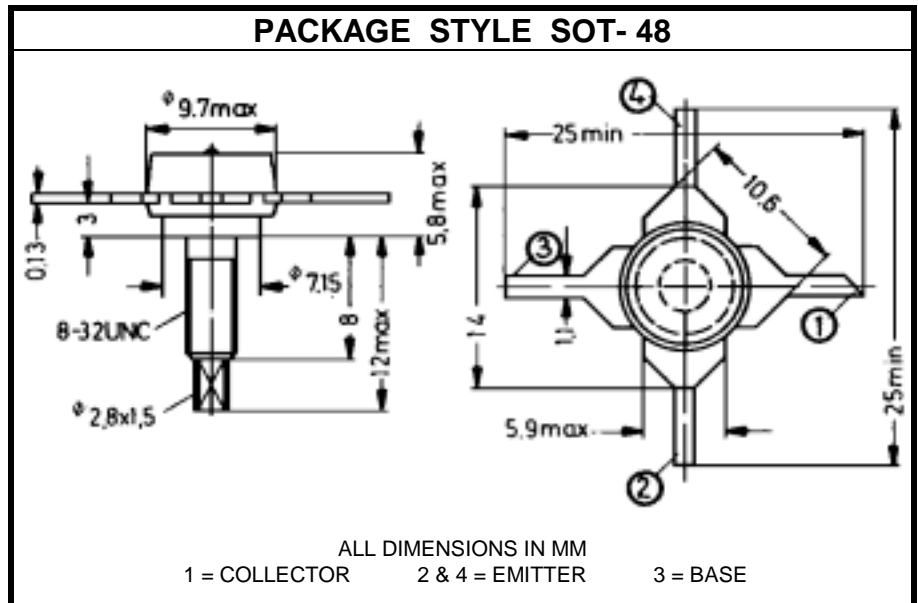
NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI BRF65** is Designed for 20 V Large-Signal RF Amplifier Applications.

MAXIMUM RATINGS

I_C	400 mA 1.0 A (PEAK) $f \geq 1.0$ MHz
V_{CE}	25 V
V_{CB}	40 V
P_{DISS}	5.0 W @ $T_{mb} = 125^\circ\text{C}$ $f \geq 1.0$ MHz
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+200^\circ\text{C}$
θ_{JC}	15 $^\circ\text{C/W}$


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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 5.0$ mA			25			V
BV_{CER}	$I_C = 5.0$ mA	$R_{BE} = 10 \Omega$		40			V
BV_{CBO}	$I_C = 1.0$ mA			40			V
BV_{EBO}	$I_E = 1.0$ mA			3.5			V
I_{CBO}	$V_{CB} = 20$ V					100	μA
h_{FE}	$V_{CE} = 20$ V	$I_C = 200$ mA $I_C = 400$ mA		30 20			---
$V_{CE(SAT)}$	$I_C = 200$ mA	$I_B = 20$ mA				0.75	V
C_{ob}	$V_{CB} = 20$ V $f = 1.0$ MHz					10	pF
f_t	$V_{CE} = 20$ V	$I_C = 200$ mA	$f = 500$ MHz	1.2			GHz
	$V_{CE} = 20$ V	$I_C = 400$ mA	$f = 500$ MHz	1.0			
G_p	$V_{CE} = 20$ V	$I_C = 200$ mA	$f = 200$ MHz	15	19		dB
			$f = 800$ MHz		4.5		
P_o	$V_{CE} = 20$ V	$I_C = 200$ mA	$f = 200$ MHz		450		mW