

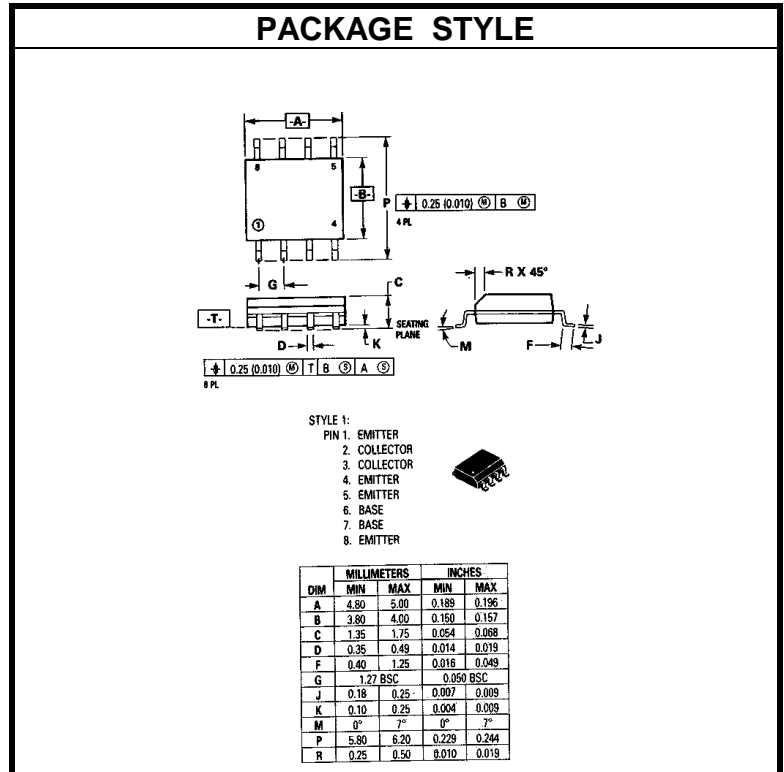
NPN SILICON RF TRANSISTOR

DESCRIPTION:

The **ASI MRF4427** is Designed for General Purpose Amplifier and Oscillator in VHF and UHF applications.

MAXIMUM RATINGS

I_C	400 mA
V_{CEO}	20 V
V_{CBO}	40 V
V_{EBO}	4.0 V
P_{DISS}	1.5 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+150^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	125 $^\circ\text{C}/\text{W}$


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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 5.0\text{ mA}$			20			V
BV_{CER}	$I_C = 5.0\text{ mA}$	$R_{BE} = 10\ \Omega$		40			V
BV_{EBO}	$I_E = 100\ \mu\text{A}$			2.0			V
I_{CEO}	$V_{CB} = 12\text{ V}$					20	μA
h_{FE}	$V_{CE} = 5.0\text{ V}$	$I_C = 100\text{ mA}$		10	50	200	---
	$V_{CE} = 5.0\text{ V}$	$I_C = 360\text{ mA}$		5.0			
$V_{CE(sat)}$	$I_C = 50\text{ mA}$	$I_B = 20\text{ mA}$			60		mV
C_{OB}	$V_{CB} = 12\text{ V}$	$f = 1.0\text{ MHz}$				3.0	pF
f_t	$V_{CE} = 12\text{ V}$	$I_C = 50\text{ mA}$	$f = 200\text{ MHz}$		1600		MHz
G_{pe}	$V_{CC} = 12\text{ V}$ $P_{OUT} = 1.0\text{ W}$	$P_{IN} = 15\text{ mW}$	$f = 175\text{ MHz}$		18		dB
η		$I_C = 50\text{ mA}$			60		%
$ S_{21} ^2$					14	16.4	