

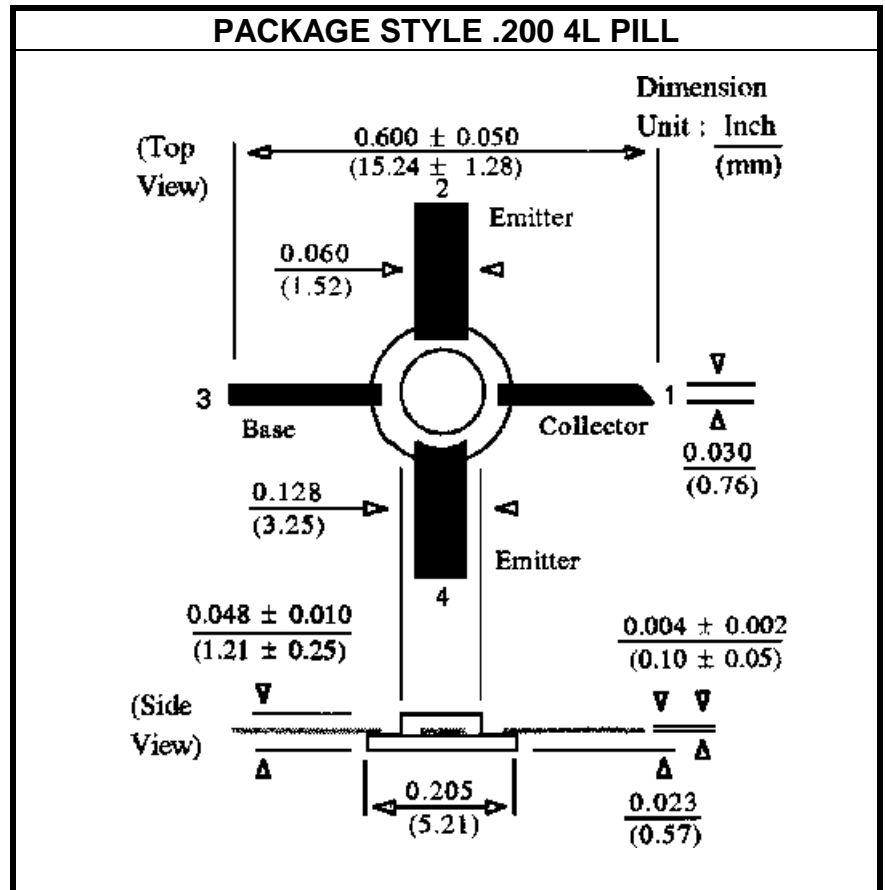
NPN SILICON BJT TRANSISTOR

DESCRIPTION:

The **ASI HP35821E** is a Common Emitter Device Designed for Medium Power Class C Applications Operating at VHF,UHF Frequencies.

MAXIMUM RATINGS

I_C	35 mA
I_C	180 mA (MAX)
V_{CEO}	20 V
V_{CBO}	40 V
P_{DISS}	700 mW @ $T_C = 50\text{ }^\circ\text{C}$
T_J	-65 $^\circ\text{C}$ to +175 $^\circ\text{C}$
T_{STG}	-65 $^\circ\text{C}$ to +150 $^\circ\text{C}$



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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
I_{CBO}	$V_{CB} = 10\text{ V}$					400	μA
h_{FE}	$V_{CE} = 8.0\text{ V}$	$I_C = 15\text{ mA}$		30	110	300	---
f_t	$V_{CE} = 10\text{ V}$	$I_C = 60\text{ mA}$	$f = 1.0\text{ GHz}$		8.0		GHz
$ S_{21} ^2$	$V_{CE} = 10\text{ V}$	$I_C = 60\text{ mA}$	$f = 1.0\text{ GHz}$		15.6		dB
$ S_{21} ^2$	$V_{CE} = 10\text{ V}$	$I_C = 60\text{ mA}$	$f = 2.0\text{ GHz}$		9.0		dB
P_{1dB}	$V_{CE} = 10\text{ V}$	$I_C = 75\text{ mA}$	$f = 1.0\text{ GHz}$		27		dBm
NF	$V_{CE} = 8.0\text{ V}$	$I_C = 20\text{ mA}$	$f = 1.0\text{ GHz}$		1.6		dB