



NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI LT3014** is a Common Emitter Device Designed for General Purpose Class A and AB Amplifier Applications up to 1.0 GHz.

FEATURES INCLUDE:

- Gold Metalization
- Emitter Ballasting
- High Gain

MAXIMUM RATINGS

I_C	300 mA
V_{CB}	45 V
P_{DISS}	5.0 W @ $T_C = 25^\circ\text{C}$
T_J	-55°C to $+200^\circ\text{C}$
T_{STG}	-55°C to $+200^\circ\text{C}$
q_{JC}	33.0°C/W

PACKAGE STYLE .280 4L STUD				
DIM	MILLIMETER	TOL	INCHES	TOL
A	25.40	.38	1.000	.015
B	45°	5°	45°	5°
C	0.76	.13	.030	.005
D	5.18 DIA	.13	.204 DIA	.005
E	1.19	.13	.047	.005
F	0.13	.02	.005	.001
G	2.92	.13	.115	.005
H	12.83	.38	.505	.015
I	3.30	.13	.130	.005
J	16.18	REF	.637	REF
K	1.52	.13	.060	.005

1 = COLLECTOR 2 & 4 = EMITTER
3 = BASE

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 10\text{ mA}$	22			V
BV_{CES}	$V_{BE} = 0\text{ V}$ $I_C = 10\text{ mA}$	50			V
BV_{EBO}	$I_E = 1.0\text{ mA}$	3.5			V
h_{FE}	$V_{CE} = 5.0\text{ V}$ $I_C = 100\text{ mA}$	20		200	---
P_G	$V_{CE} = 20\text{ V}$ $I_{CQ} = 150\text{ mA}$ $f = 1.0\text{ GHz}$	3.0	3.5		GHz
P_{1dB}	$V_{CE} = 20\text{ V}$ $I_{CQ} = 150\text{ mA}$ $f = 1.0\text{ GHz}$	27	29		dBm
IP_3	$V_{CE} = 20\text{ V}$ $I_{CQ} = 150\text{ mA}$ $f = 1.0\text{ GHz}$ $P_{OUT} = 10\text{ dBm}$ (2 EQUAL TONES)		48		dBm
C_{ob}	$V_{CB} = 28\text{ V}$ $f = 1.0\text{ MHz}$		2.0	3.0	pF
f_t	$V_{CE} = 20\text{ V}$ $I_{CQ} = 150\text{ mA}$ $f = 1.0\text{ GHz}$	3.0	3.5		GHz