

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI OSC-0.3C** is Designed for General Purpose Oscillator Applications up to 7.5 GHz.

FEATURES:

- $V_{CC} = 12\text{ V}$
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	225 mA
V_{CB}	25 V
P_{DISS}	5.0 W @ $T_C = 25\text{ }^\circ\text{C}$
T_J	$-65\text{ }^\circ\text{C}$ to $+200\text{ }^\circ\text{C}$
T_{STG}	$-65\text{ }^\circ\text{C}$ to $+200\text{ }^\circ\text{C}$
θ_{JC}	30 $^\circ\text{C/W}$

PACKAGE STYLE .138 2L FLG

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.025 / 0.635	
B	.138 / 3.505	
C	.275 / 6.985	
D	.375 / 9.525	
E	.031 / 0.787	
F	.062 / 1.575	

ORDER CODE: ASI10636

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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 1.0\text{ mA}$			16			V
BV_{CBO}	$I_C = 100\text{ }\mu\text{A}$			25			V
I_{EBO}	$I_{EB} = 1.0\text{ V}$					2.0	μA
I_{CBO}	$V_{CB} = 15\text{ V}$					500	μA
h_{FE}	$V_{CE} = 8.0\text{ V}$	$I_C = 100\text{ mA}$		20		200	---
C_{OB}	$V_{CB} = 10\text{ V}$	$f = 1.0\text{ MHz}$				1.5	pF
η_C	$V_{CC} = 12\text{ V}$	$P_{OUT} = 0.3\text{ W}$	$f = 7.5\text{ GHz}$		22		%
$ S_{21C} ^2$	$V_{CE} = 8.0\text{ V}$	$I_C = 100\text{ mA}$	$f = 1.0\text{ GHz}$	4.0			dB
P_{OSC}	$V_{CC} = 12\text{ V}$	$I_C = 120\text{ mA}$	$f = 7.5\text{ GHz}$		320		mW