NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI 2SC2782** is a12.5 V epitaxial silicon NPN transistor. Designed primarily for VHF power amplifer application up to175 MHz band.

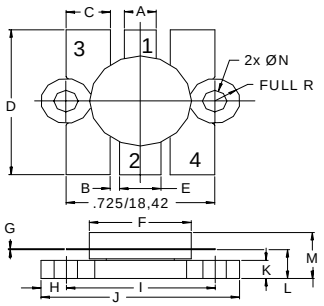
FEATURES:

- 175 MHz 12.5 V
- P_G = 6.4 dB at 80 W/175 MHz
- ***Omnigold***™ Metalization System
- Common Emitter configuration

MAXIMUM RATINGS

I_C	20 A
V_{CBO}	36 V
V_{CEO}	16 V
V_{EBO}	4.0 V
P_{DISS}	220 W @ T_C = 25 °C
T_J	-65 °C to +175 ° C
T_{STG}	-65 °C to +175 °C
θ_{JC}	0.68 °C/W

PACKAGE STYLE .500 6L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.150 / 3.43	.160 / 4.06
B	.045 / 1.14	
C	.210 / 5.33	.220 / 5.59
D	.835 / 21.21	.865 / 21.97
E	.200 / 5.08	.210 / 5.33
F	.490 / 12.45	.510 / 12.95
G	.003 / 0.08	.007 / 0.18
H	.125 / 3.18	
I	.725 / 18.42	
J	.970 / 24.64	.980 / 24.89
K	.090 / 2.29	.105 / 2.67
L	.150 / 3.81	.170 / 4.32
M		.285 / 7.24
N	.120 / 3.05	.135 / 3.43

1 = Collecttor 2 = Base 3&4 = Emitter

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I_C = 50 mA			16			V
BV_{CBO}	I_C = 20 mA			36			V
BV_{EBO}	I_E = 1.0 mA			4.0			V
h_{FE}	V_{CE} = 5.0 V	I_C = 10 A		10		100	---
C_{OB}	V_{CB} = 12.5 V		f = 1.0 MHz			390	pF
PG	V_{CC} = 12.5 V	P_{OUT} = 80 W	f = 175 MHz	6.4	6.8		dB
ηC	P_{IN} = 18 W			60	70		%
Z_{IN}	V_{CC} = 12.5 V	P_{OUT} = 80 W	f = 175 MHz	---	1.0 + j1.5	---	Ω
Z_{CL}	V_{CC} = 12.5 V	P_{OUT} = 80 W	f = 175 MHz	---	1.2 + j1.8	---	Ω

Specifications are subject to change without notice.