

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

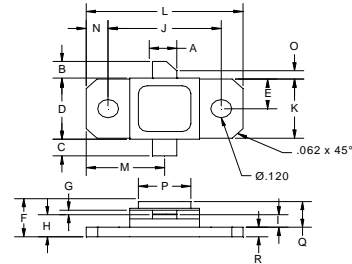
The **ASI SD8250** is Designed for Class C TACAN/DME Applications.

FEATURES:

- Internal Input/Output Matching Network
- Emitter Ballasted.
- $P_E = 7.8$ dB at 30 W/ 1215 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	20 A
V_{CC}	50 V
P_{DISS}	575 W @ T_C 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	0.28 °C/W

PACKAGE STYLE .400 2L FLG


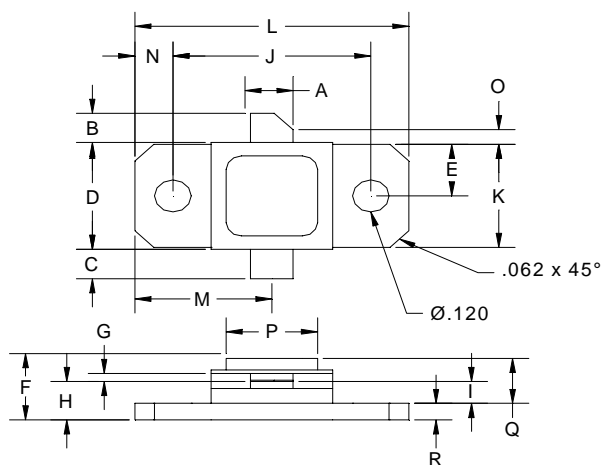
DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.140 / 3.56	
B	.110 / 2.80	
C	.110 / 2.80	
D	.395 / 10.03	.407 / 10.34
E	.193 / 4.90	
F		.230 / 5.84
G	.003 / 0.08	.006 / 0.15
H	.118 / 3.00	.131 / 3.33
I	.063 / 1.60	
J	.650 / 16.51	
K	.386 / 9.80	
L	.900 / 22.86	
M	.450 / 11.43	
N	.125 / 3.18	
O	.050 / 1.27	
P	.405 / 10.29	
Q	.170 / 4.32	
R	.062 / 1.58	

CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 35$ mA	65			V
BV_{CES}	$I_C = 25$ mA	60			V
BV_{EBO}	$I_E = 15$ mA	4.0			V
I_{CES}	$V_{CE} = 50$ V			20	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 1.0$ A	10		200	---
P_G	$V_{CC} = 50$ V $P_{OUT} = 250$ W $f = 960 - 1215$ MHz	8.0			dB
η_c		38			%

IMPEDANCE DATA
 $P_{IN} = 40 \text{ W}$
 $V_{CC} = 50 \text{ V}$

FREQ	$Z_{IN} (\Omega)$	$Z_{CL} (\Omega)$
960 MHz	$1.0 + j3.5$	$1.9 - j1.8$
1090 MHz	$4.0 + j3.5$	$1.6 - j0.9$
1215 MHz	$2.2 + j2.2$	$1.4 - j1.1$



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.140 / 3.56	
B	.110 / 2.80	
C	.110 / 2.80	
D	.395 / 10.03	.407 / 10.34
E	.193 / 4.90	
F	.230 / 5.84	
G	.003 / 0.08	.006 / 0.15
H	.118 / 3.00	.131 / 3.33
I	.063 / 1.60	
J	.650 / 16.51	
K	.386 / 9.80	
L	.900 / 22.86	
M	.450 / 11.43	
N	.125 / 3.18	
O	.050 / 1.27	
P	.405 / 10.29	
Q	.170 / 4.32	
R	.062 / 1.58	