

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI SD1425** is Designed for Class AB Linear Base Station Applications in the 800-900 MHz Frequency Range.

FEATURES INCLUDE:

- Gold Metalization
- Input Matching
- Common Emitter
- Emitter Ballast Resistors

MAXIMUM RATINGS

I_C	5.0 A
V_{CBO}	50 V
V_{CES}	45 V
P_{DISS}	43 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
q_{JC}	3.0°C/W

PACKAGE STYLE .230 6L FLG				
Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	24.64	24.89	0.970	0.980
B	5.72	5.96	0.225	0.235
C	6.10	6.60	0.240	0.260
D	2.93	3.17	0.115	0.125
E	2.72	2.97	0.107	0.117
G	4.33	5.33	0.190	0.210
H	4.07	4.57	0.160	0.180
J	0.11	0.15	0.004	0.005
K	10.30	11.43	0.425	0.450
M	45 NOM		45 NOM	
N	9.02	9.77	0.355	0.385
Q	3.05	3.30	0.120	0.130
U	18.29	18.54	0.720	0.730

1,3,4,6 = EMITTER 2 = BASE
5 = COLLECTOR

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 100\text{ mA}$	50			V
BV_{CEO}	$I_C = 40\text{ mA}$	25			V
BV_{CER}	$I_C = 50\text{ mA}$ $R_{BE} = 22\ \Omega$	50			V
BV_{EBO}	$I_E = 10\text{ mA}$	3.5			V
I_{CBO}	$V_{CB} = 24\text{ V}$			2.0	mA
h_{FE}	$V_{CE} = 10\text{ V}$ $I_C = 200\text{ mA}$	20		100	---
C_{ob}	$V_{CB} = 24\text{ V}$ $f = 1.0\text{ MHz}$		40	50	pF
P_{out}	$V_{CC} = 24\text{ V}$ $P_{in} = 5.3\text{ W}$ $f = 960\text{ MHz}$	30			W
G_p		7.5			dB
h_C		45	50		%



ADVANCED SEMICONDUCTOR, INC.

7525 ETHEL AVENUE • NORTH HOLLYWOOD, CA 91605 • (818) 982-1202 • TELEX: 18-2651 • FAX (818) 765-3004