

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI SD1458** is designed for Class A operation in VHF and Band III television Applications up to 230 MHz.

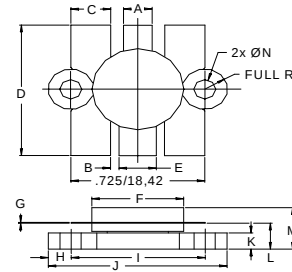
FEATURES:

- Common Emitter
- $P_G = 14 \text{ dB}$ at 14 W/225 MHz
- **Omnigold™** Metalization System
- Emitter Ballasting

MAXIMUM RATINGS

I_C	10 A
V_{CBO}	60 V
V_{CEO}	35 V
V_{EBO}	4.0 V
P_{DISS}	140 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	1.5°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

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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 50 \text{ mA}$		35			V
BV_{CER}	$I_C = 50 \text{ mA}$	$R_{BE} = 10 \Omega$	60			V
BV_{EBO}	$I_E = 10 \text{ mA}$		4.0			V
I_{CES}	$V_{CE} = 50 \text{ V}$				5.0	mA
h_{FE}	$V_{CE} = 5.0 \text{ V}$	$I_C = 1.0 \text{ A}$	10		100	---
C_{OB}	$V_{EB} = 28 \text{ V}$	$f = 1.0 \text{ MHz}$			80	pF
P_G	$V_{CE} = 28 \text{ V}$	$I_C = 2.5 \text{ A}$	14			dB
IMD_3	$P_{OUT} = 14 \text{ W}$				-55	dBc