

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

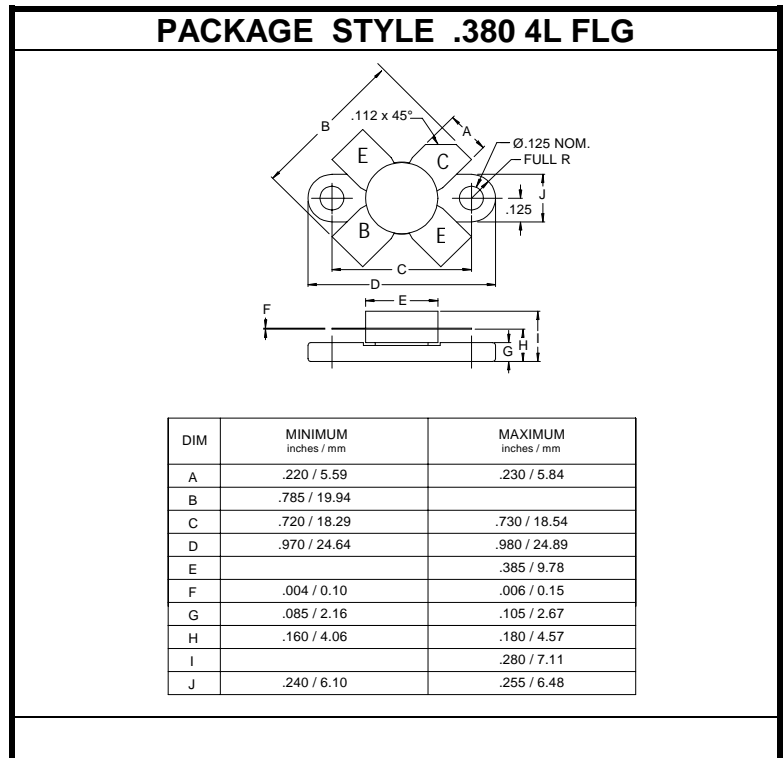
The **ASI SD1222-5** is a transistor designed primarily for 12.5 V AM Class-C amplifiers in the 118-136 MHz band and 28 V Class-C RF amplifiers in ground stations.

## FEATURES:

- $P_G = 8.2$  dB min. at 5 W/30 MHz
- $IMD_3 = -30$  dBc max. at 20 W<sub>(PEP)</sub>
- **Omnigold™** Metalization System
- Emitter Ballasting

## MAXIMUM RATINGS

$I_C$	3.0 A
$V_{CBO}$	65 V
$V_{CEO}$	35 V
$V_{EBO}$	4.0 V
$P_{DISS}$	30 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +200 °C
$\theta_{JC}$	5.83 °C/W



## CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 200$ mA	35			V
$BV_{CES}$	$I_C = 200$ mA	65			V
$BV_{EBO}$	$I_E = 10$ mA	4.0			V
$I_{CBO}$	$V_{CB} = 30$ V			1.0	mA
$I_{CES}$	$V_{CE} = 30$ V $T_A = 125$ °C			10	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 200$ mA	5.0			---
$C_{ob}$	$V_{CB} = 30$ V $f = 1.0$ MHz			35	pF
$G_p$	$V_{CC} = 27$ V $P_{OUT} = 20$ W $f = 136$ MHz			35	pF