

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

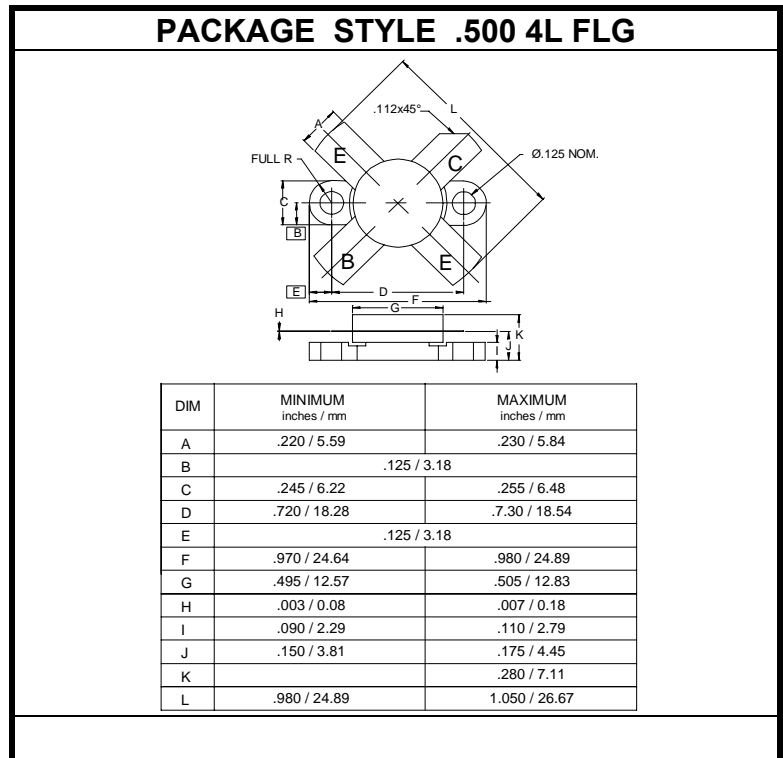
The **ASI 2SC2879** is a 12.5 V transistor designed primarily for SSB linear power amplifier applications up to 28 MHz.

## FEATURES:

- $P_G = 13$  Typ. min. at 100 W/28 MHz
- $IMD_3 = -24$  dBc max. at 100 W<sub>(PEP)</sub>
- **Omnigold™** Metalization System

## MAXIMUM RATINGS

$I_C$	25 A
$V_{CBO}$	45 V
$V_{CEO}$	18 V
$V_{EBO}$	4.0 V
$P_{DISS}$	250 W @ $T_C = 25$ °C
$T_J$	-65 °C to +175 °C
$T_{STG}$	-65 °C to +175 °C
$\theta_{JC}$	0.6 °C/W



## CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CES}$	$I_C = 100$ mA	45			V
$BV_{CEO}$	$I_C = 100$ mA	18			V
$BV_{EBO}$	$I_E = 10$ mA	4.0			V
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 10$ A	10		150	---
$C_{OB}$	$V_{CB} = 12.5$ V $f = 1.0$ MHz		700		pF
$G_P$	$V_{CE} = 12.5$ V $I_{idle} = 100$ mA $f = 28$ MHz	13.0	15.2		dB
$\eta_C$	$P_{OUT} = 100$ W	35			%
$IMD_3$				-24	dBc
$Z_{IN}$	$V_{CC} = 12.5$ V $P_{OUT} = 100$ W $f = 28$ MHz	---	1.45 - j0.95	---	$\Omega$
$Z_{OUT}$	$V_{CC} = 12.5$ V $P_{OUT} = 100$ W $f = 28$ MHz	---	1.45 - j1.0	---	$\Omega$