

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

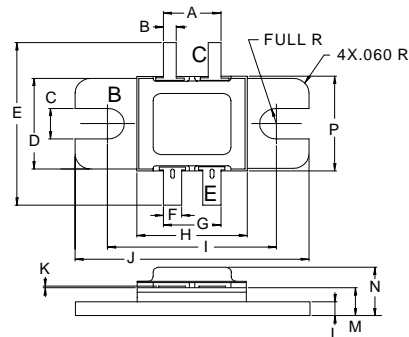
The **AUR 500** is designed for high peak power & low duty cycle applications, in the 400-500 MHz.

**FEATURES:**

- Internal Input Matching Network
- $P_G = 9.5$  dB at 500 W/500 MHz
- **Omnigold™** Metalization System
- Emitter Ballasting
- Common Base

**MAXIMUM RATINGS**

$I_C$	43.2 A
$V_{CBO}$	65 V
$V_{CES}$	65 V
$V_{EBO}$	3.5 V
$P_{DISS}$	1167 W @ $T_C = 25^\circ C$
$T_J$	$-65^\circ C$ to $+200^\circ C$
$T_{STG}$	$-65^\circ C$ to $+150^\circ C$
$\theta_{JC}$	$0.15^\circ C/W$

**PACKAGE STYLE .400 BAL FLG (A)**


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.210 / 5.33	.230 / 5.84
B	.045 / 1.14	.055 / 1.40
C	.125 / 3.18	.135 / 3.43
D	.380 / 9.65	.390 / 9.91
E	.770 / 19.56	.830 / 21.08
F	.070 / 1.78	.080 / 2.03
G	.215 / 5.46	.235 / 5.97
H	.420 / 10.67	.430 / 10.92
I	.645 / 16.38	.655 / 16.64
J	.895 / 22.73	.905 / 22.99
K	.002 / 0.05	.006 / 0.15
L	.058 / 1.47	.065 / 1.65
M	.115 / 2.92	.130 / 3.30
N		.230 / 5.84
P	.395 / 10.03	.405 / 10.29

**ORDER CODE: ASI10550**
**CHARACTERISTICS**  $T_C = 25^\circ C$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 50$ mA	65			V
$BV_{CES}$	$I_C = 50$ mA	65			V
$BV_{EBO}$	$I_E = 10$ mA	3.5			V
$I_{CBO}$	$V_{CB} = 30$ V			15	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 5.0$ A	00		200	---
$P_G$	$V_{CC} = 40$ V $P_{OUT} = 500$ W $f = 425$ MHz	9.5			dB
$\eta_c$		50			%

NOTE: Pulse Width = 250  $\mu$ S. Duty Cycle = 10%