

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI CBSL100** is Designed for Class AB, Cellular Base Station Applications up to 960 MHz.

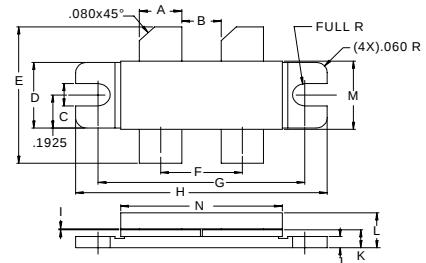
FEATURES:

- Internal Input/Output Matching Network
- $P_G = 9.0$ dB at 100 W/ 960 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	25 A
V_{CBO}	60 V
V_{CEO}	30 V
V_{EBO}	3.0 V
P_{DISS}	310 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}	0.6 $^\circ\text{C/W}$

PACKAGE STYLE .400 BAL FLG (C)



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.210 / 5.33	
C	.120 / 3.05	.130 / 3.30
D	.380 / 9.65	.390 / 9.91
E	.780 / 19.81	.820 / 20.83
F	.435 / 11.05	
G	1.090 / 27.69	
H	1.335 / 33.91	1.345 / 34.16
I	.003 / 0.08	.007 / 0.18
J	.060 / 1.52	.070 / 1.78
K	.082 / 2.08	.100 / 2.54
L		.205 / 5.21
M	.395 / 10.03	.407 / 10.34
N	.850 / 21.59	.870 / 22.10

ORDER CODE: ASI10585

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 100$ mA	60			V
BV_{CEO}	$I_C = 100$ mA	30			V
BV_{EBO}	$I_E = 50$ mA	3.0			V
I_{CES}	$V_{CE} = 28$ V			10	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 3.0$ A	15		70	---
P_G	$V_{CE} = 24$ V $I_{CQ} = 2 \times 100$ mA $f = 960$ MHz	9.0			dB
IMD	$P_{OUT} = 100$ W	45	-32		dBc
η_C					%