

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

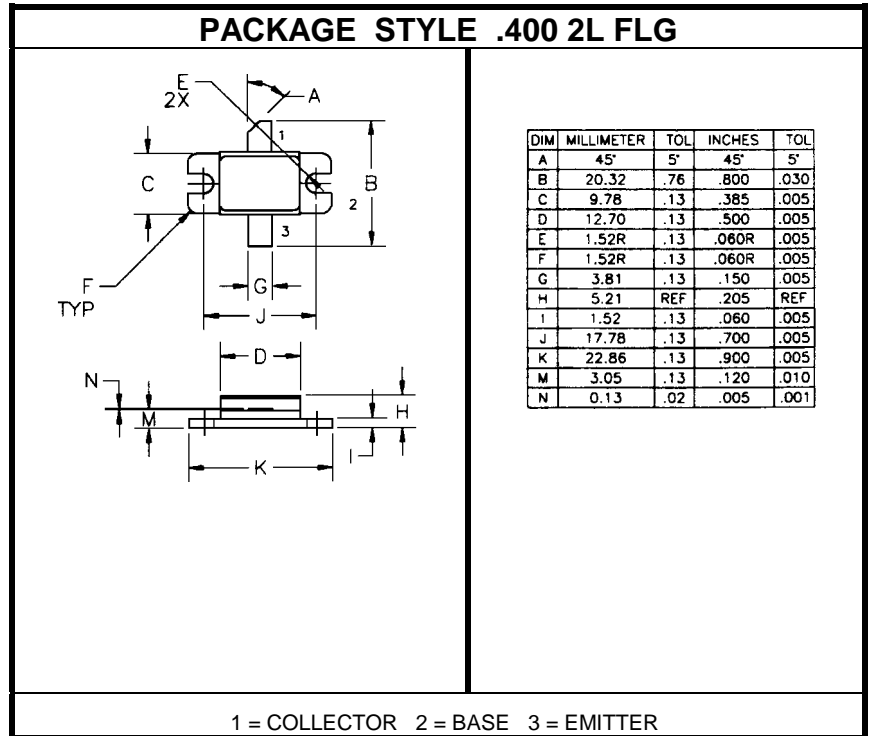
The **ASI MX0912B351Y** is Designed for General Purpose Class C Power Amplifier Applications up to 1215 MHz.

FEATURES:

- $P_G = 7.0$ dB min.at 50 W / 1215 MHz
- Common Base
- **Omnigold™** Metalization System

MAXIMUM RATINGS

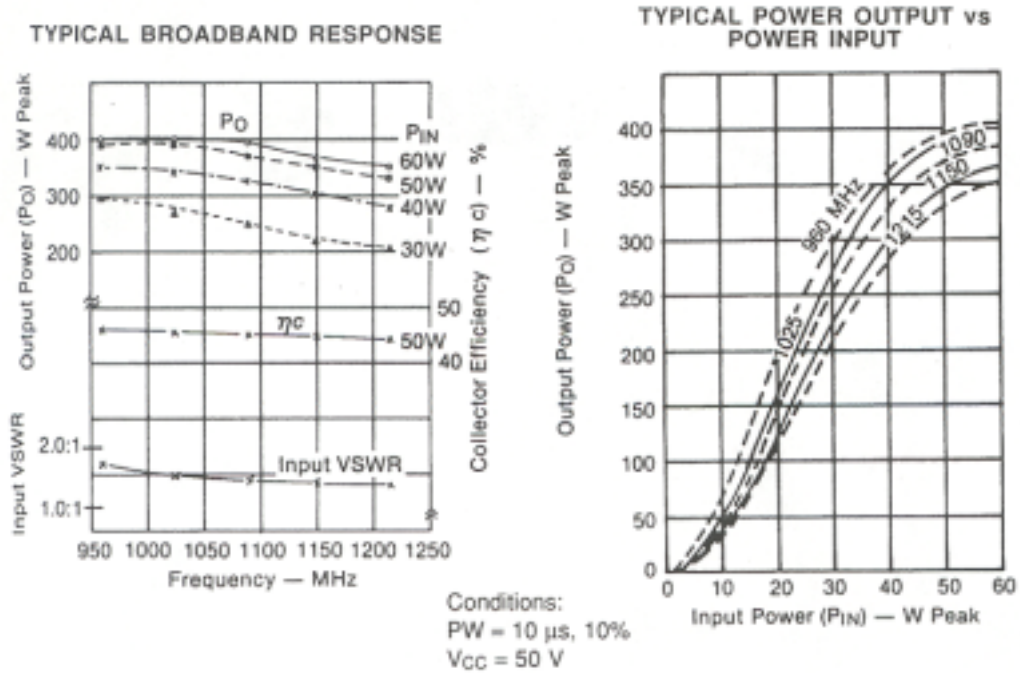
V_{CE}	20 V
V_{CB}	65 V
V_{EB}	3.0 V
I_C	21 A
P_{DISS}	960 W @ $T_C = 25^\circ C$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	0.18 °C/W


CHARACTERISTICS $T_C = 25^\circ C$

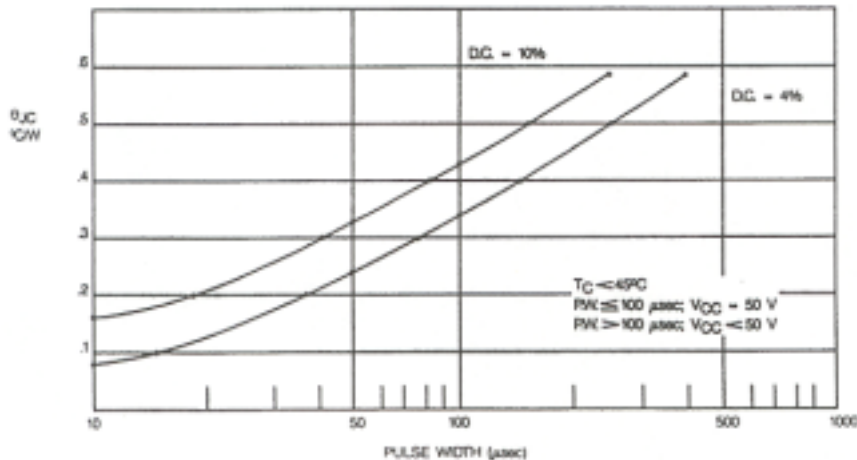
SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
I_{CBO}	$V_{CB} = 65$ V			140	mA
I_{CES}	$V_{CE} = 60$ V			140	mA
I_{EBO}	$V_{EB} = 1.5$ V			1.4	mA
P_G	$V_{CC} = 50$ $P_{OUT} = 325$ W $f = 960 - 1215$ MHz	7.0			dB
η_c		40			%



TYPICAL PERFORMANCE

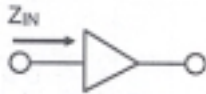


MAXIMUM THERMAL RESISTANCE vs PULSE WIDTH & DUTY CYCLE

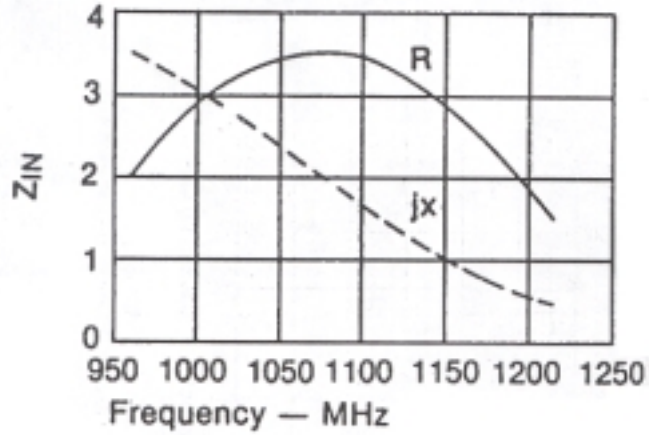


IMPEDANCE DATA

TYPICAL INPUT IMPEDANCE

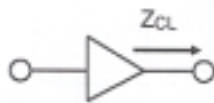


$P_{IN} = 60\text{ W}$
 $V_{CC} = 50\text{ V}$
 $Z_0 = 50\text{ ohms}$

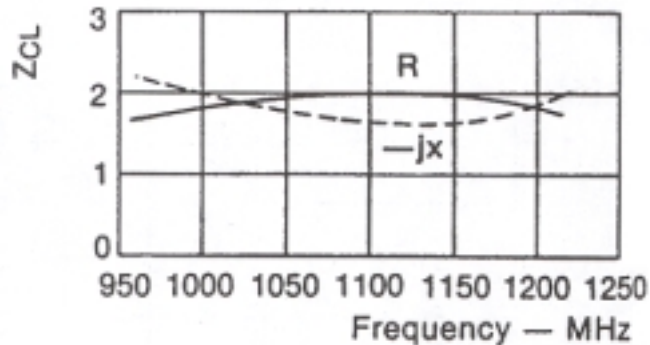


FREQ.	$Z_{IN} (\Omega)$	$Z_{CL} (\Omega)$
L = 960 MHz	$2.0 + j 3.6$	$1.7 - j 2.2$
M = 1090 MHz	$3.5 + j 1.7$	$2.0 - j 1.7$
H = 1215 MHz	$1.6 + j 0.5$	$1.8 - j 2.0$

TYPICAL COLLECTOR LOAD IMPEDANCE



$P_{IN} = 60\text{ W}$
 $V_{CC} = 50\text{ V}$
 $Z_0 = 50\text{ ohms}$



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Advanced Semiconductor, Inc.:](#)

[MX0912B351Y](#)