

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI BLV33** is a Common Emitter Device Designed for Class A Television Applications.

FEATURES INCLUDE:

- Gold Metalization
- Emitter Ballasting

MAXIMUM RATINGS

I_C	12.5 A
V_{CESM}	65 V
V_{CEO}	33 V
P_{DISS}	132 W @ T _C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	1.5 °C/W

PACKAGE STYLE .500 4L STUD		
	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	1.010/25,65	1.050/26,67
B	.220/5,59	.230/5,84
C	.495/12,57	.505/12,83
D	.003/0,08	.007/0,18
E	.160/4,06	.180/4,57
F	.622/15,80	
G	.100/2,54	.130/3,31
H	.415/10,54	.425/10,80
I	.720/18,29	
J	.250/6,35	.290/7,37
1 = COLLECTOR 2 & 4 = EMITTER 3 = BASE		
ORDER CODE: ASI10498		

CHARACTERISTICS T_C = 25°C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I _C = 100 mA			33			V
BV_{CES}	I _C = 25 mA			65			V
BV_{EBO}	I _E = 10 mA			4.0			V
I_{CES}	V _{CE} = 30 V					10	mA
h_{FE}	V _{CE} = 25 V	I _C = 3.0 A		15		100	---
C_c	V _{CB} = 25 V	f = 1.0 MHz			155		pF
C_{re}	V _{CE} = 25 V	I _C = 100 mA	f = 1.0 MHz		88		
C_{cs}	V _{CE} = 25 V	I _C = 100 mA	f = 1.0 MHz		3.0		
f_T	V _{CB} = 25 V	I _E = 3.0 A			680		MHz
	V _{CB} = 25 V	I _E = 6.0 A			750		
G_p	V _{CE} = 25 V	I _C = 3.2 A	P _{out} = 19 W	9.0	9.7		---
	f = 224.25 MHz						

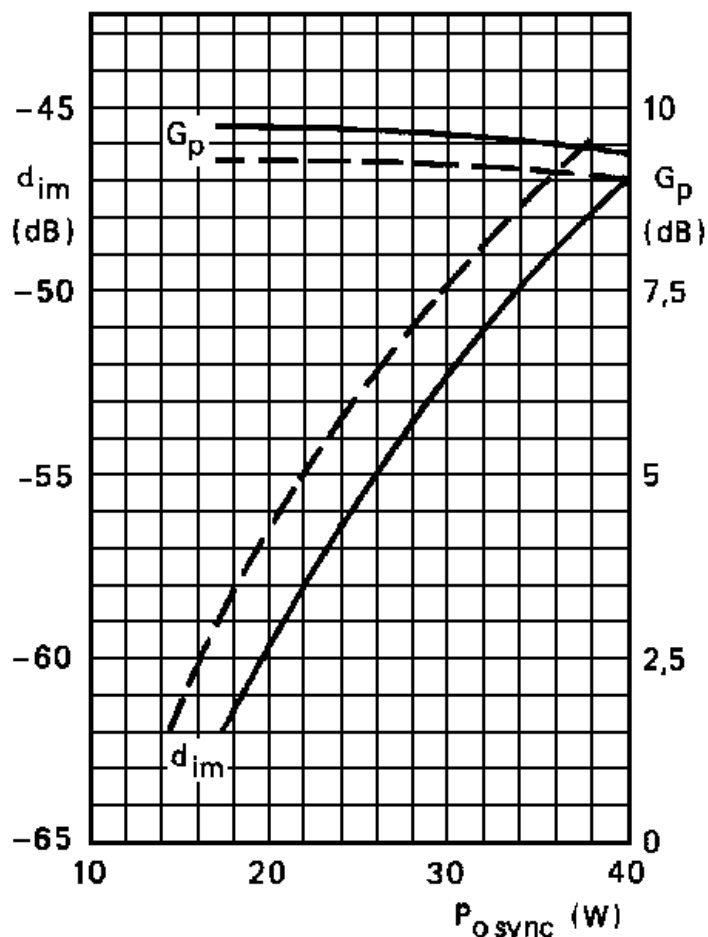


Fig. 1 Intermodulation distortion (d_{im}) and power gain as a function of output power.

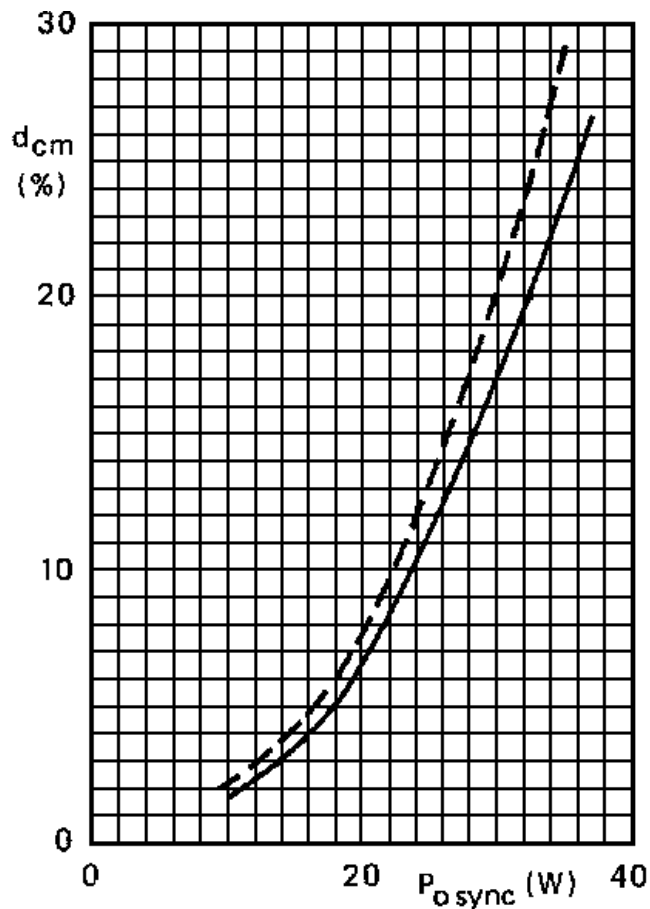


Fig. 2 Cross-modulation distortion (d_{cm}) as a function of output power.

Conditions for fig. 1 and 2:

Typical values; $V_{CE} = 25$ V; $I_C = 3.2$ A; $T_h = 25^\circ\text{C} - T_h = 70^\circ\text{C}$; $f_{vision} = 224.25$ MHz.