T-33-17

PNP HDTV video transistor

BFQ290

PHILIPS INTERNATIONAL 56E D 7110826 0045673 597 PHIN

FEATURES

- High breakdown voltages
- Low output capacitance
- High gain bandwidth product
- Good thermal stability
- Gold metallization ensures excellent reliability
- Complementary NPN type BFQ291.

PINNING

PIN	DESCRIPTION
1	collector
2	base
3	emitter
4	base

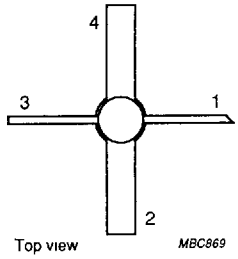

Fig.1 SOT172A1.

DESCRIPTION

The BFQ290 has a 4-lead SOT172A1 stud envelope with a ceramic cap. All leads are isolated from the flange.

LIMITING VALUES

In accordance with the Absolute Maximum System (IEC 134).

SYMBOL	PARAMETER	MIN.	MAX.	UNIT
$-V_{CBO}$	collector-base voltage	–	230	V
$-V_{CER}$	collector-emitter voltage	–	225	V
$-I_C$	collector current	–	250	mA
P_{tot}	total power dissipation (note 1)	–	4	W
T_j	junction temperature	–	200	°C

Note

1. T_{mb} = 100 °C.

CHARACTERISTICS

T_j = 25 °C unless otherwise specified.

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	UNIT
$-V_{(BR)CBO}$	collector-base breakdown voltage	open emitter; $-I_C$ = 100 μA	195	–	V
$-V_{(BR)CER}$	collector-emitter breakdown voltage	$-I_C$ = 1 mA; R_{BE} = 100 Ω	190	–	V
h_{FE}	DC current gain	$-I_C$ = 25 mA; $-V_{CE}$ = 10 V	15	–	
f_T	transition frequency	$-I_C$ = 25 mA; $-V_{CE}$ = 10 V; f = 100 MHz	400	–	MHz
C_{cb}	collector-base capacitance	$I_C = I_c$ = 0; $-V_{CB}$ = 10 V; f = 1 MHz	–	1.8	pF