

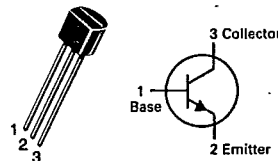
T-31-19

MAXIMUM RATINGS

Rating	Symbol	BF 371	BF 373	Unit
Collector-Emitter Voltage	V _{CEO}	30	45	V _{dc}
Collector-Base Voltage	V _{CBO}	40	45	V _{dc}
Emitter-Base Voltage	V _{EBO}	4.0		V _{dc}
Collector Current - Continuous	I _C	100		mAdc
Total Device Dissipation @ T _A = 25°C Derate above 25°C	P _D	350 2.8		mW mW/°C
Total Device Dissipation @ T _C = 25°C Derate above 25°C	P _D	1.0 8.0		Watt mW/°C
Operating and Storage Junction Temperature Range	T _J , T _{stg}	-55 to +150		°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case	R _{θJC}	125	°C/W
Thermal Resistance, Junction to Ambient	R _{θJA}	357	°C/W

BF371
BF373CASE 29-04, STYLE 2
TO-92 (TO-226AA)

VHF TRANSISTORS

NPN SILICON

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted.)

Characteristic	Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS					
Collector-Emitter Breakdown Voltage (I _C = 1.0 mAdc, I _B = 0)	BF371 BF373 V _{(BR)CEO}	30 40	— —	— —	V _{dc}
Collector-Base Breakdown Voltage (I _C = 100 μAdc, I _E = 0)	BF371 BF373 V _{(BR)CBO}	40 45	— —	— —	V _{dc}
Emitter-Base Breakdown Voltage (I _E = 10 μAdc, I _C = 0)	V _{(BR)EBO}	4.0	—	—	V _{dc}
Collector Cutoff Current (V _{CB} = 30 Vdc, I _E = 0)	I _{CBO}	—	—	50	nAdc
ON CHARACTERISTICS					
DC Current Gain (I _C = 7.0 mAdc, V _{CE} = 10 Vdc) (I _C = 20 mAdc, V _{CE} = 2.0 Vdc)	h _{FE}	40 15	— —	— —	—
Collector-Emitter Saturation Voltage (I _C = 20 mAdc, I _B = 2.0 mAdc)	V _{CE(sat)}	—	—	0.5	V _{dc}
Base-Emitter On Voltage (I _C = 7.0 mA, V _{CE} = 10 Vdc)	V _{BE(on)}	—	—	0.9	V _{dc}
DYNAMIC CHARACTERISTICS					
Current-Gain — Bandwidth Product (I _C = 5.0 mAdc, V _{CE} = 10 Vdc, f = 100 MHz)	BF371 BF373 f _T	400 500	720 720	— —	MHz
Common-Emitter Feedback Capacitance (V _{CB} = 10 Vdc, I _E = 0, f = 1.0 MHz)	C _{re}	—	0.2	0.32	pF