

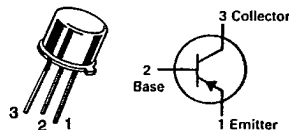
2N5322
2N5323

T-37-17
T-37-15

MAXIMUM RATINGS

Rating	Symbol	2N5322	2N5323	Unit
Collector-Emitter Voltage	V _{CEO}	75	50	Vdc
Collector-Base Voltage	V _{CBO}	100	75	Vdc
Emitter-Base Voltage	V _{EBO}	7.0	5.0	Vdc
Base Current	I _B	1.0		Adc
Collector Current — Continuous	I _C	2.0		Adc
Total Device Dissipation @ T _C = 25°C Derate above 25°C	P _D	10	0.057	Watts W/°C
Operating and Storage Junction Temperature Range	T _J , T _{stg}	-65 to +200		°C

CASE 79-04, STYLE 1
TO-39 (TO-205AD)



SWITCHING TRANSISTORS

PNP SILICON

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case	R _{θJC}	17.5	°C/W

3

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

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Collector-Emitter Breakdown Voltage(1) (I _C = 100 mA, I _B = 0)	V _{(BR)CEO}	75 50	—	Vdc
Collector Cutoff Current (V _{CE} = 100 Vdc, V _{BE} = 1.5 Vdc) (V _{CE} = 70 Vdc, V _{BE} = 1.5 Vdc, T _C = 150°C) (V _{CE} = 75 Vdc, V _{BE} = 1.5 Vdc) (V _{CE} = 45 Vdc, V _{BE} = 1.5 Vdc, T _C = 150°C)	I _{CEX}	—	0.1 5.0 0.1 5.0	mA
Emitter Cutoff Current (V _{BE} = 7.0 Vdc, I _C = 0) (V _{BE} = 5.0 Vdc, I _C = 0)	I _{EBO}	—	0.1 0.1	mA
ON CHARACTERISTICS(1)				
DC Current Gain (I _C = 500 mA, V _{CE} = 4.0 Vdc)	h _{FE}	30 40	130 250	—
(I _C = 1.0 A, V _{CE} = 2.0 Vdc)		10	—	
Collector-Emitter Saturation Voltage (I _C = 500 mA, I _B = 50 mA)	V _{CE(sat)}	—	0.7 1.2	Vdc
Base-Emitter On Voltage (I _C = 500 mA, V _{CE} = 4.0 Vdc)	V _{BE(on)}	—	1.1 1.4	Vdc
SMALL-SIGNAL CHARACTERISTICS				
Small-Signal Current Gain (I _C = 50 mA, V _{CE} = 4.0 Vdc, f = 10 MHz)	h _{fe}	5	—	—
SWITCHING CHARACTERISTICS				
Turn-On Time (V _{CC} = 30 Vdc, I _C = 500 mA, I _{B1} = 50 mA)	t _{on}	—	100	ns
Turn-Off Time (V _{CC} = 30 Vdc, I _C = 500 mA, I _{B1} = I _{B2} = 50 mA)	t _{off}	—	1000	ns

(1) Pulse Test: Pulse Width ≤ 300 μs, Duty Cycle ≤ 2.0%.

T-37-17
T-37-15

FIGURE 1 — TYPICAL INPUT CHARACTERISTICS

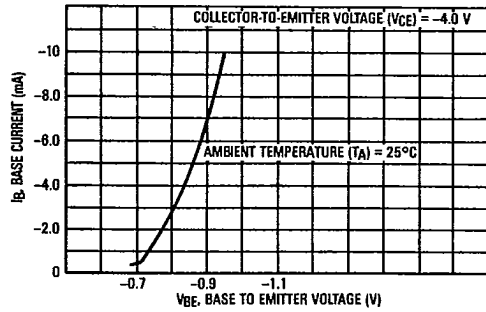


FIGURE 2 — TYPICAL TRANSFER CHARACTERISTICS

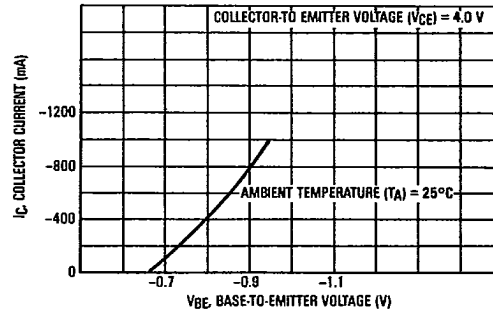


FIGURE 3 — CURRENT GAIN CHARACTERISTICS versus COLLECTOR-EMITTER VOLTAGE

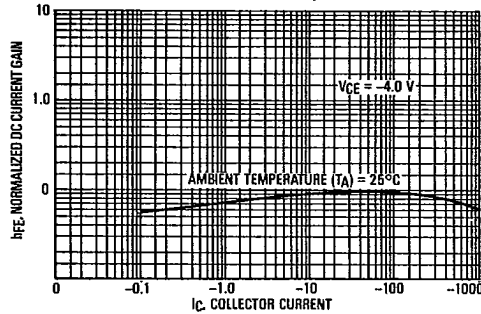


FIGURE 4 — MAXIMUM SAFE OPERATING AREAS (SOA)

