CV9790

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

AMPLIFIER TRANSISTOR

PNP SILICON

4

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	60	Vdc
Collector-Base Voltage	V_{CBO}	60	Vdc
Emitter-Base Voltage	V_{EBO}	5	Vdc
Collector Current – Continuous	I_C	0.6	Adc
Total Device Dissipation @ T_A = 25°C Derate above 25°C	P_D	0.5 3.43	Watt mW/°C
Operating and Storage Junction Temperature Range	T_J, T_{stg}	−55 to +175	°C

Refer to 2N2904 for graphs.

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

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Collector-Emitter Breakdown Voltage (I_C = 10 mA, I_B = 0)(1)	$V_{(BR)CEO}$	60		V
Collector Cutoff Current (V_{CB} = 50 V, I_E = 0) (V_{CB} = 50 V, I_E = 0, T_A = 100°C)	I_{CBO}		75 1	nA µA
Emitter-Base Cutoff Current (V_{EB} = 3 V, I_C = 0) (V_{EB} = 5 V, I_C = 0)	I_{EBO}		100 10	nA µA
ON CHARACTERISTICS				
Collector-Emitter Saturation Voltage (I_C = 150 mA, I_B = 15 mA)(1)	$V_{CE(sat)}$		0.4	V
Emitter-Base Saturation Voltage (I_C = 30 mA, I_B = 1 mA)(1) (I_C = 150 mA, I_B = 15 mA(1)	$V_{BE(sat)}$		0.9 1.3	V
DC Current Gain (V_{CE} = 10 V, I_C = 10 mA)(1) I_C = 150 mA)(1) I_C = 1 mA) I_C = 50 mA)	h_{FE}	50 40 40 50	200	
SMALL SIGNAL CHARACTERISTICS				
Transition Frequency (V_{CE} = 20 V, I_C = 50 mA, f = 100 MHz)	f_T	100		MHz
Output Capacitance (V_{CB} = 10 V, I_E = 0, f = 1 MHz)	C_{ob}		12	pF

(1) Pulsed: Pulse Duration = 300 µs, Duty Cycle = 1%.