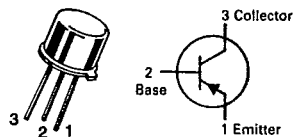


MM5005 thru MM5007

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



AUDIO TRANSISTORS

PNP SILICON

MAXIMUM RATINGS

Rating	Symbol	MM5005	MM5006	MM5007	Unit
Collector-Emitter Voltage	V_{CE0}	60	80	100	Vdc
Collector-Base Voltage	V_{CBO}	80	100	120	Vdc
Emitter-Base Voltage	V_{EBO}	5.0			Vdc
Collector Current — Continuous	I_C	2.0			Adc
Total Device Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	1.5 8.67			Watts mW/°C
Total Device Dissipation @ $T_C = 25^\circ\text{C}$ Derate above 25°C	P_D	8.0 45.7			Watts mW/°C
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-65 to +200			°C

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted.)

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Collector-Emitter Breakdown Voltage(1) ($I_C = 10 \text{ mAdc}, I_B = 0$)	$V_{(BR)CEO}$	60 80 100	— — —	Vdc
Collector-Base Breakdown Voltage ($I_C = 100 \mu\text{Adc}, I_E = 0$)	$V_{(BR)CBO}$	80 100 120	— — —	Vdc
Emitter-Base Breakdown Voltage ($I_E = 100 \mu\text{Adc}, I_C = 0$)	$V_{(BR)EBO}$	5.0	—	Vdc
Collector Cutoff Current ($V_{CB} = 60 \text{ Vdc}, I_E = 0$) ($V_{CB} = 80 \text{ Vdc}, I_E = 0$) ($V_{CB} = 100 \text{ Vdc}, I_E = 0$)	I_{CBO}	— — —	200 200 200	nAdc
Emitter Cutoff Current ($V_{EB} = 4.0 \text{ Vdc}, I_C = 0$)	I_{EBO}	—	100	nAdc
ON CHARACTERISTICS				
DC Current Gain ($I_C = 1.0 \text{ mAdc}, V_{CE} = 1.0 \text{ Vdc}$) ($I_C = 150 \text{ mAdc}, V_{CE} = 2.5 \text{ Vdc}$) ($I_C = 200 \text{ mAdc}, V_{CE} = 2.5 \text{ Vdc}$) ($I_C = 250 \text{ mAdc}, V_{CE} = 2.5 \text{ Vdc}$)	h_{FE}	40 50 50 50	— 250 250 250	—
Collector-Emitter Saturation Voltage ($I_C = 150 \text{ mAdc}, I_B = 15 \text{ mAdc}$)	$V_{CE(sat)}$	—	0.5	Vdc
Base-Emitter On Voltage ($I_C = 150 \text{ mAdc}, V_{CE} = 2.5 \text{ Vdc}$)	$V_{BE(on)}$	0.65	0.8	Vdc
SMALL-SIGNAL CHARACTERISTICS				
Current-Gain — Bandwidth Product(1) ($I_C = 50 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}, f = 20 \text{ MHz}$)	f_T	30	—	MHz
Output Capacitance ($V_{CB} = 10 \text{ Vdc}, I_E = 0, f = 100 \text{ kHz}$)	C_{obo}	www.DataSheet4U.com		

(1) Pulse Test: Pulse Width $\leq 300 \mu\text{s}$, Duty Cycle $\leq 2.0\%$.