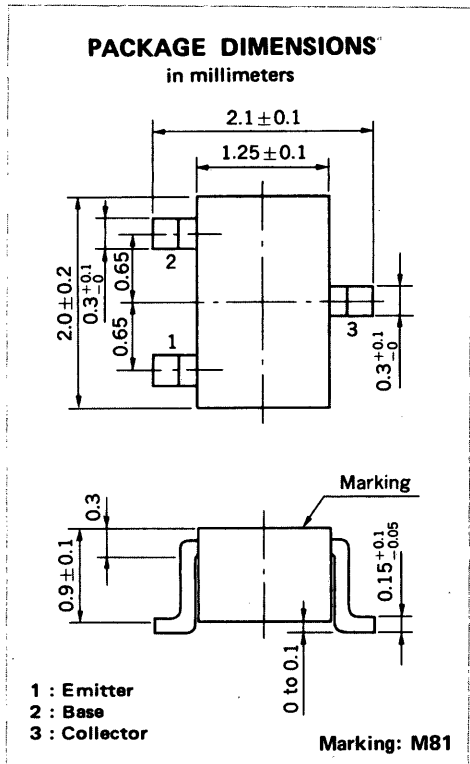
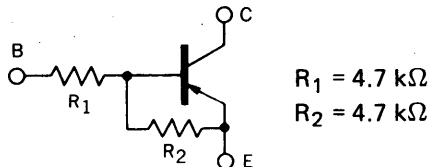


MEDIUM SPEED SWITCHING
RESISTOR BUILT-IN TYPE PNP TRANSISTOR



FEATURES

- Resistors Built-in TYPE



- Complementary to GA1L3M

ABSOLUTE MAXIMUM RATINGS

Maximum Voltages and Currents ($T_a = 25^\circ\text{C}$)

Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-50	V
Emitter to Base Voltage	V_{EBO}	-10	V
Collector Current (DC)	I_C	-100	mA
Collector Current (Pulse)	I_C	-200	mA
Maximum Power Dissipation			
Total Power Dissipation			
at 25°C Ambient Temperature	P_T	150	mW
Maximum Temperatures			
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

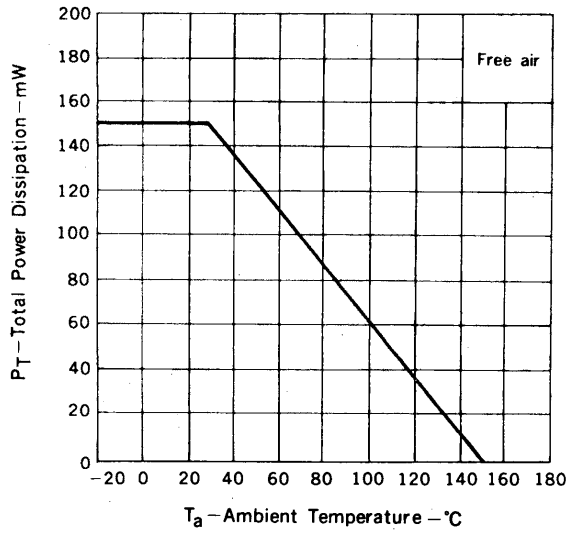
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector Cutoff Current	I_{CBO}			-100	nA	$V_{CB} = -50 \text{ V}, I_E = 0$
DC Current Gain	h_{FE1}^*	20	40	80		$V_{CE} = -5.0 \text{ V}, I_C = -5.0 \text{ mA}$
DC Current Gain	h_{FE2}^*	70	110			$V_{CE} = -5.0 \text{ V}, I_C = -5.0 \text{ mA}$
Collector Saturation Voltage	$V_{CE(sat)}^*$		-0.08	-0.3	V	$I_C = -5.0 \text{ mA}, I_B = -0.25 \text{ mA}$
Low-Level Input Voltage	V_{IL}^*		-1.1	-0.8	V	$V_{CE} = -5.0 \text{ V}, I_C = -100 \mu\text{A}$
High-Level Input Voltage	V_{IH}^*	-3.0	-1.5		V	$V_{CE} = -0.2 \text{ V}, I_C = -5.0 \text{ mA}$
Input Resistor	R_1	3.29	4.70	6.11	$\text{k}\Omega$	
Resistor Ratio	R_1/R_2	0.9	1.0	1.1		
Turn-on Time	t_{on}			0.5	μs	$V_{CC} = -5 \text{ V}, V_{in} = -5 \text{ V}$
Storage Time	t_{stg}			3.0	μs	$R_L = 1 \text{ k}\Omega$
Turn-off Time	t_{off}			5.0	μs	$PW = 2 \mu\text{s}, \text{Duty Cycle} \leq 2\%$

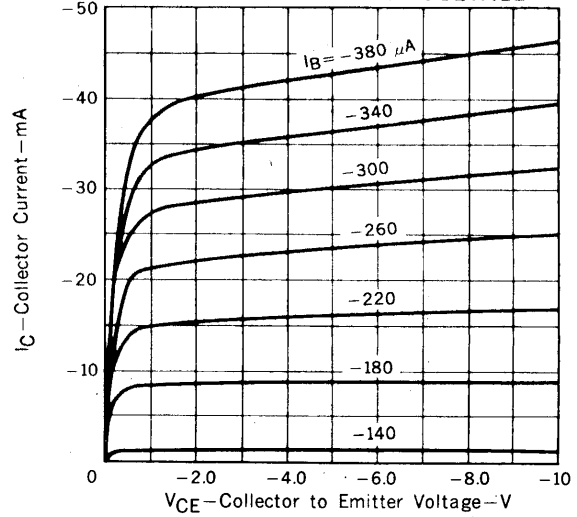
* Pulsed: $PW \leq 350 \mu\text{s}$, Duty Cycle $\leq 2\%$

TYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

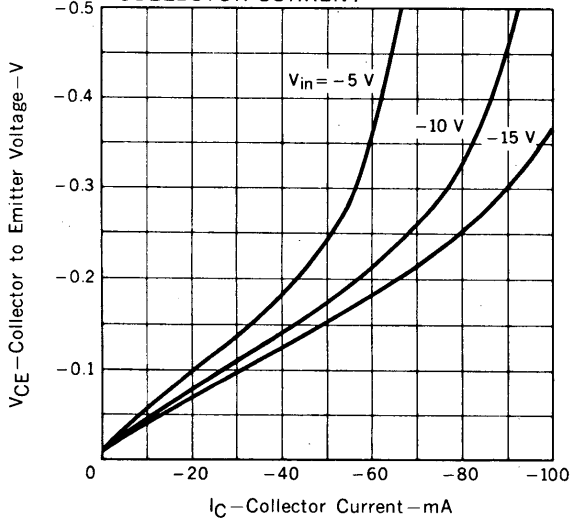
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



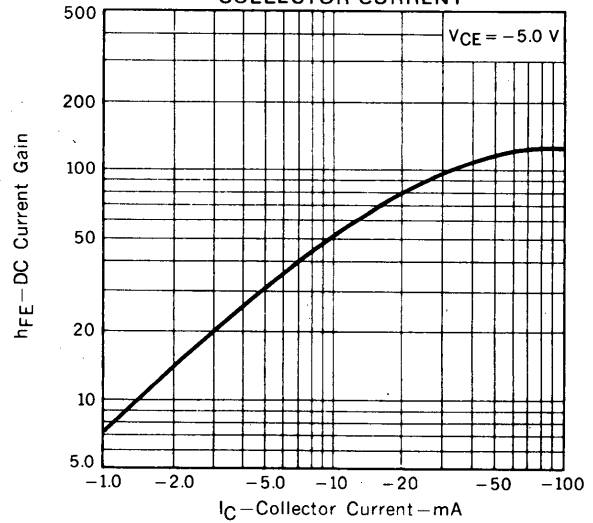
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



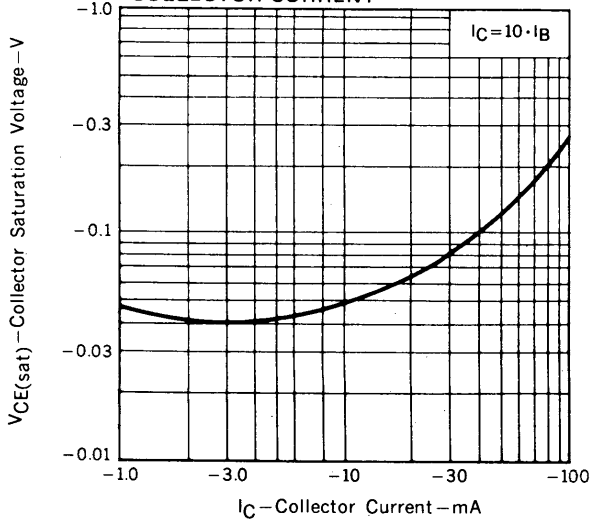
COLLECTOR TO EMITTER VOLTAGE vs. COLLECTOR CURRENT



DC CURRENT GAIN vs. COLLECTOR CURRENT



COLLECTOR SATURATION VOLTAGE vs. COLLECTOR CURRENT



INPUT VOLTAGE vs. COLLECTOR CURRENT

