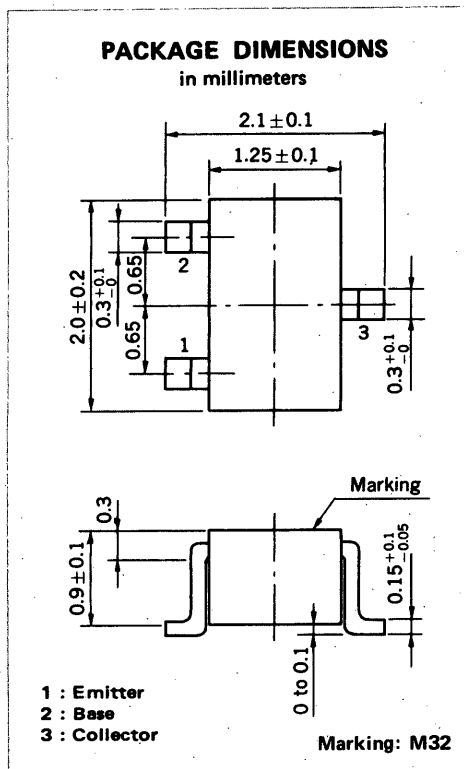
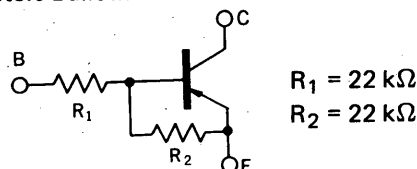


MEDIUM SPEED SWITCHING
RESISTOR BUILT-IN TYPE PNP TRANSISTOR



FEATURES

- Resistors Built-in TYPE



- Complementary to GA1F4M

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)	$I_{C(DC)}$	-100	mA
Collector Current (Pulse)	$I_{C(Pulse)}$	-200	mA

Maximum Power Dissipation

Total Power Dissipation at 25°C Ambient Temperature	P_T	150	mW
--	-------	-----	----

Maximum Temperatures

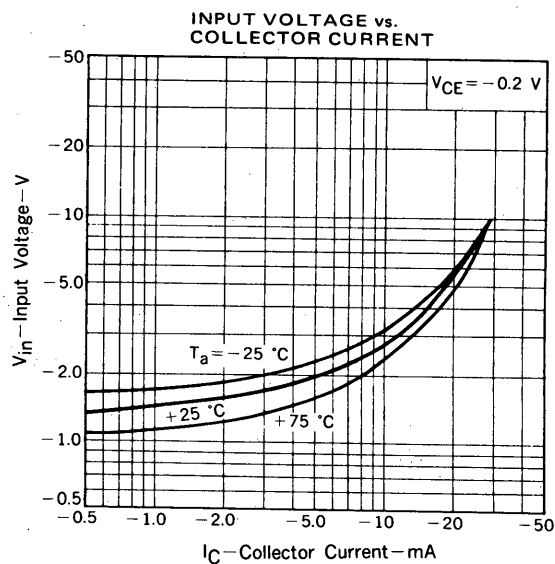
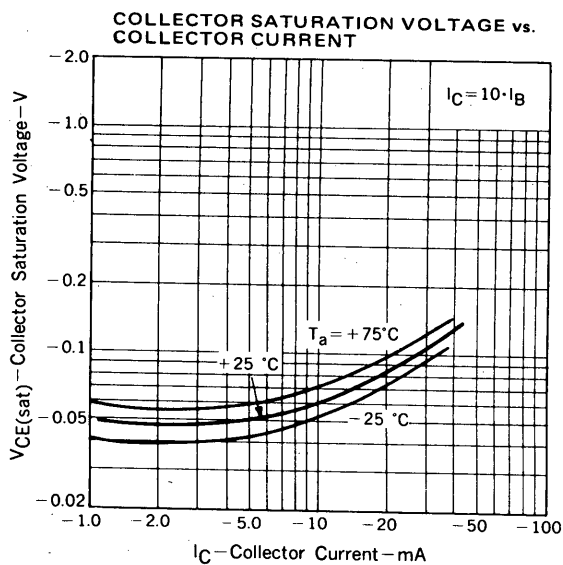
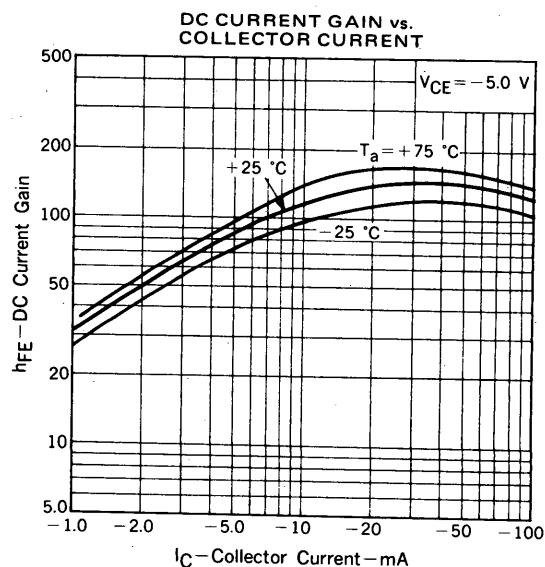
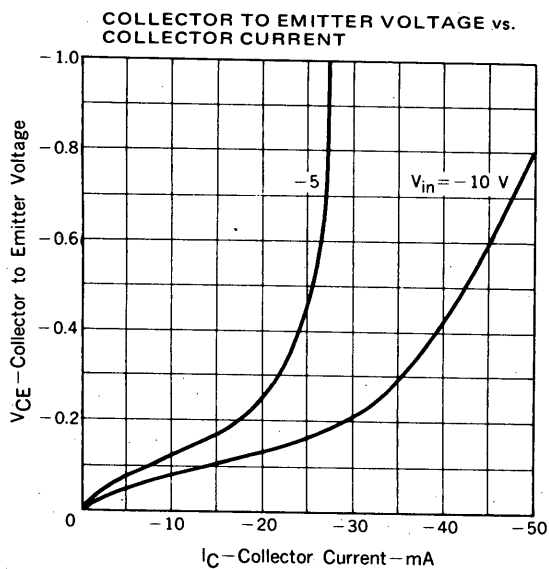
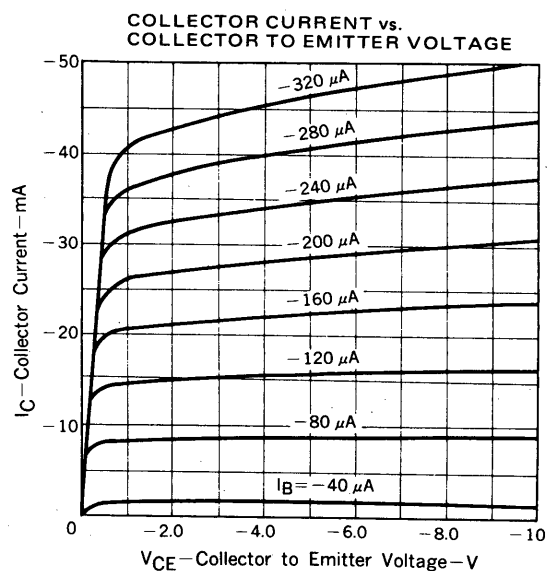
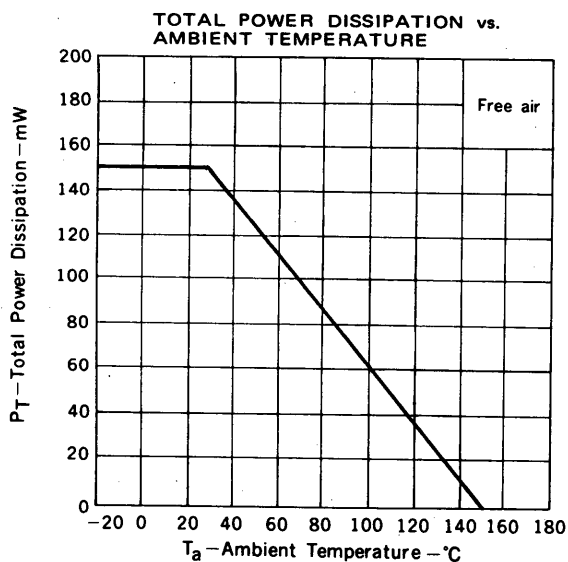
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

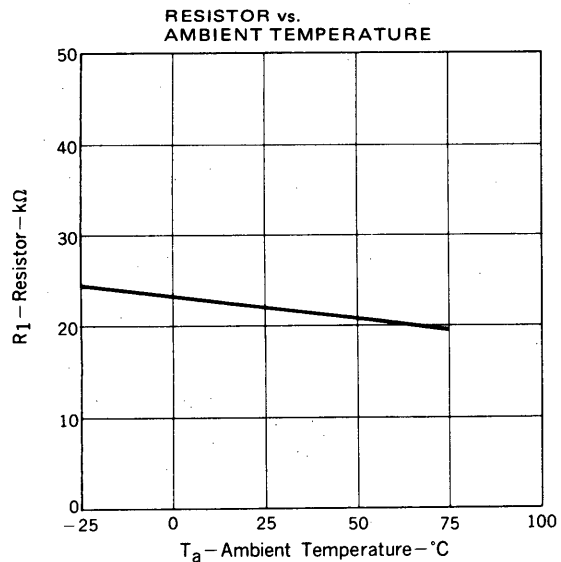
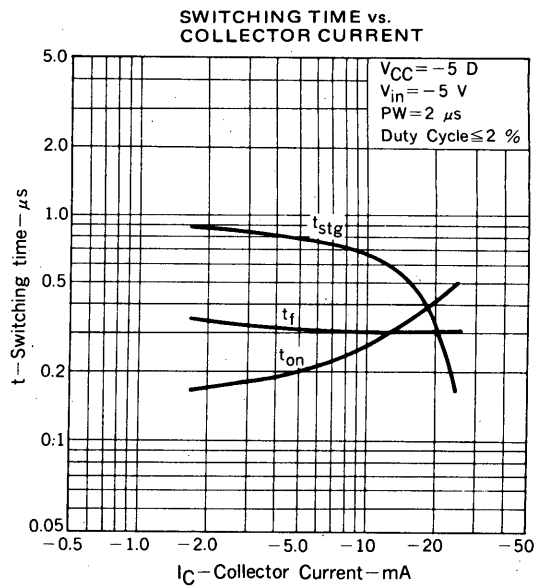
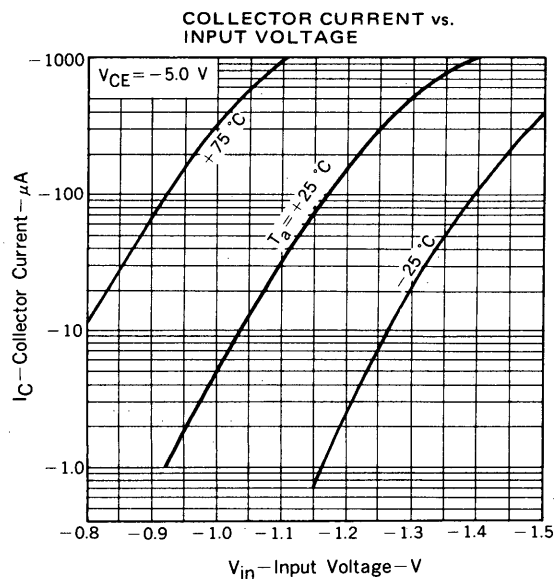
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

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}^*	60	85	195		$V_{CE} = -5.0 \text{ V}, I_C = -5.0 \text{ mA}$
DC Current Gain	h_{FE2}^*	90	145			$V_{CE} = -5.0 \text{ V}, I_C = -50 \text{ mA}$
Collector Saturation Voltage	$V_{CE(sat)}^*$		-0.05	-0.2	V	$I_C = -5.0 \text{ mA}, I_B = -0.25 \text{ mA}$
Low-Level Input Voltage	V_{IL}^*		-1.17	-0.8	V	$V_{CE} = -5.0 \text{ V}, I_C = -100 \mu\text{A}$
High-Level Input Voltage	V_{IH}^*	-4.0	-2.0		V	$V_{CE} = -0.2 \text{ V}, I_C = -5.0 \text{ mA}$
Input Resistor	R_1	15.4	22.0	28.6	$\text{k}\Omega$	
Resistor Ratio	R_1/R_2	0.9	1.0	1.1		
Turn-on Time	t_{on}		0.23	0.5	μs	$V_{CC} = -5 \text{ V}, V_{in} = -5 \text{ V}$ $R_L = 1 \text{ k}\Omega$ $PW = 2 \mu\text{s}, \text{Duty Cycle} \leq 2\%$
Storage Time	t_{stg}		0.8	3.0	μs	
Turn-off Time	t_{off}		1.1	3.5	μs	

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

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





[MEMO]

No part of this document may be copied or reproduced in any form or by any means without the prior written consent of NEC Corporation. NEC Corporation assumes no responsibility for any errors which may appear in this document.

NEC Corporation does not assume any liability for infringement of patents, copyrights or other intellectual property rights of third parties by or arising from use of a device described herein or any other liability arising from use of such device. No license, either express, implied or otherwise, is granted under any patents, copyrights or other intellectual property rights of NEC Corporation or of others.