



## SOT-23 Plastic-Encapsulate Transistors

**FMMT4124** TRANSISTOR ( NPN )

### FEATURES

Power dissipation

$$P_{CM} : 0.33W ( T_{amb}=25 )$$

Collector current

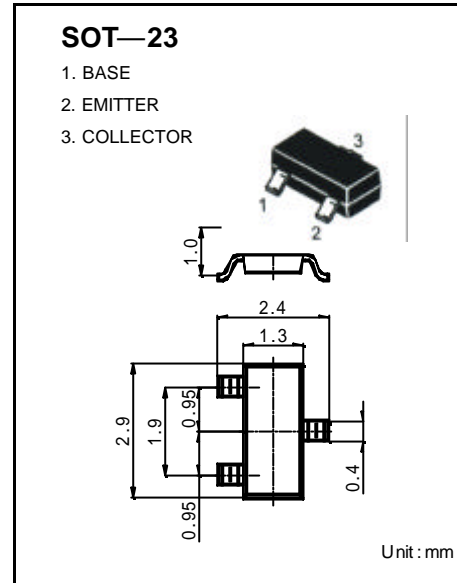
$$I_{CM} : 0.2A$$

Collector-base voltage

$$V_{(BR)CBO} : 30V$$

Operating and storage junction temperature range

$$T_J, T_{stg} : -55 \text{ to } +150$$



### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25$ unless otherwise specified )

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10 \mu A, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10 \mu A, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=20V, I_E=0$			0.05	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=3V, I_C=0$			0.05	$\mu A$
DC current gain	$H_{FE}$	$V_{CE}=1V, I_C=2mA$	120		360	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=50mA, I_B=5mA$			0.95	V
Transition frequency	$f_T$	$V_{CE}=20V, I_C=10mA$ $f=100MHz$	300			MHz

Marking	FMMT4124 : 2C
---------	---------------

# Typical Characteristics

# FMMT4124

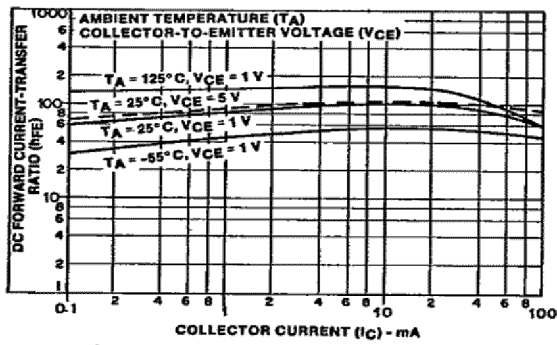


Fig. 1 - Typical dc forward current transfer ratio characteristics for 2N4123.

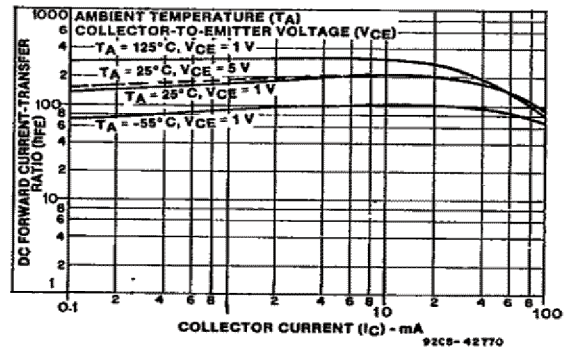


Fig. 2 - Typical dc forward current transfer ratio characteristics for 2N4124.

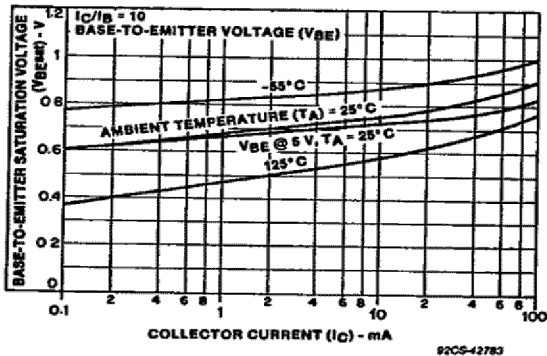


Fig. 3 - Typical base-to-emitter saturation voltage characteristics for 2N4123 and 2N4124.

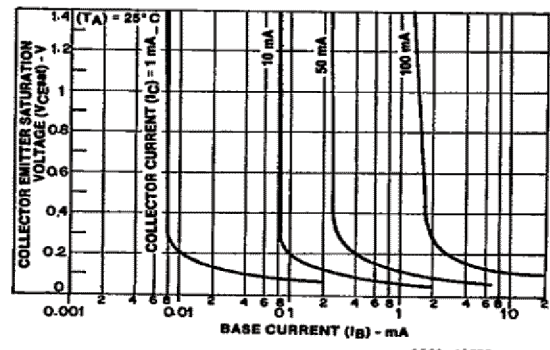


Fig. 4 - Typical collector-to-emitter saturation voltage characteristics for 2N4124 and 2N4123.

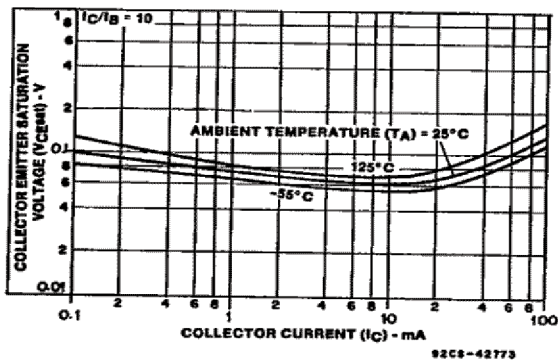


Fig. 5 - Typical collector-to-emitter saturation voltage characteristics for 2N4123.

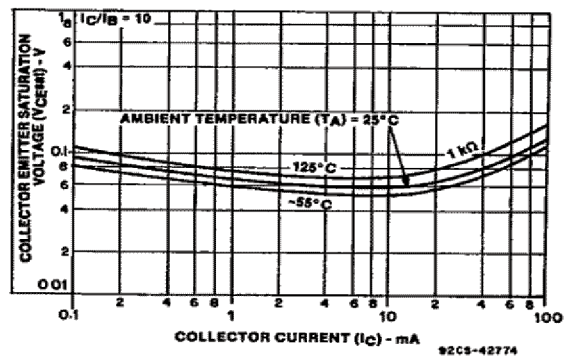


Fig. 6 - Typical collector-to-emitter saturation voltage characteristics for 2N4124.

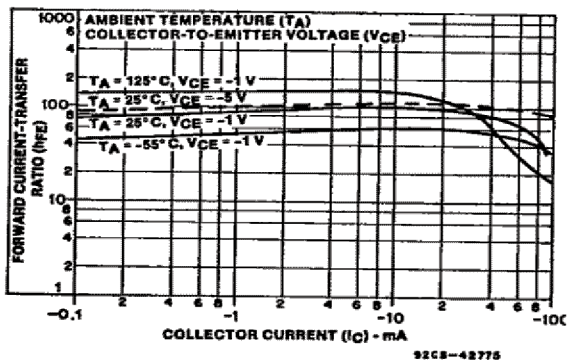


Fig. 7 - Typical dc forward-current transfer ratio characteristics for 2N4125.

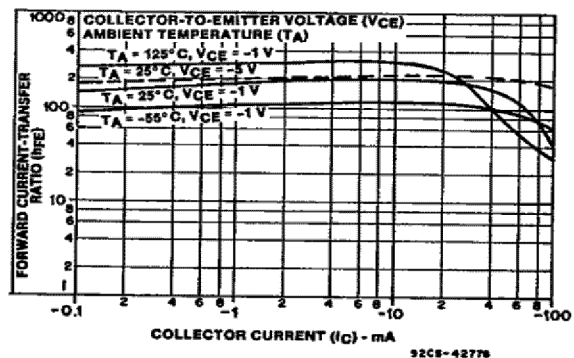


Fig. 8 - Typical dc forward-current transfer ratio characteristics for 2N4126.

# Typical Characteristics

# FMMT4124

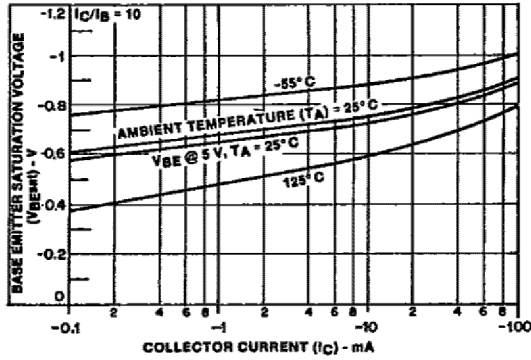


Fig. 9—Typical base-to-emitter saturation voltage characteristics for 2N4125 and 2N4126.

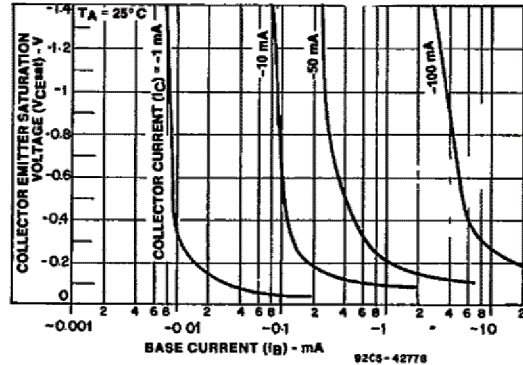


Fig. 10—Typical collector-to-emitter saturation voltage characteristics for 2N4125 and 2N4126.

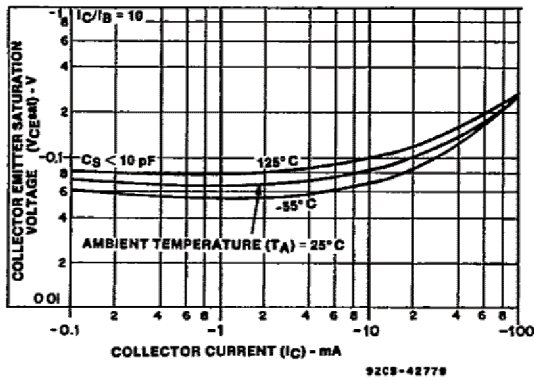


Fig. 11—Typical collector-to-emitter saturation voltage characteristics for 2N4125.

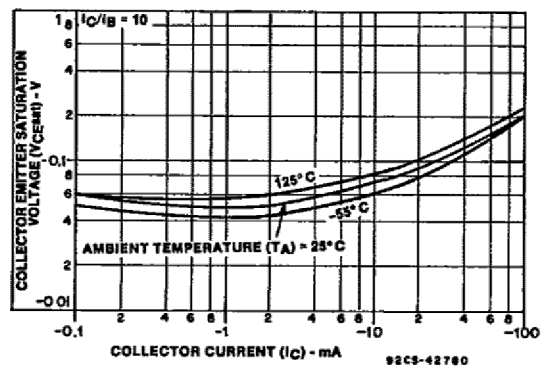


Fig. 12—Typical collector-to-emitter saturation voltage characteristics for 2N4126.