



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23-3L Plastic-Encapsulate Transistors

2SD596 TRANSISTOR (NPN)

FEATURES

- High DC Current gain. h_{FE} :200 TYP.($V_{CE}=1V, I_C=100mA$)
- Complimentary to 2SB624

MAXIMUM RATINGS ($T_A=25^{\circ}C$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	700	mA
P_C	Collector Power Dissipation	200	mW
T_j	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55-150	$^{\circ}C$

SOT-23-3L

- 1.BASE
2.EMITTER
3.COLLECTOR



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}^*$	$V_{CE}=1V, I_C=100mA$	110		400	
	$h_{FE(2)}^*$	$V_{CE}=1V, I_C=700mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=700mA, I_B=70mA$			0.6	V
Base-emitter voltage	V_{BE}^*	$V_{CE}=6V, I_C=10mA$	0.6		0.7	V
Transition frequency	f_T	$V_{CE}=6V, I_C=10mA$		170		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=6V, I_E=0, f=10MHz$		12		pF

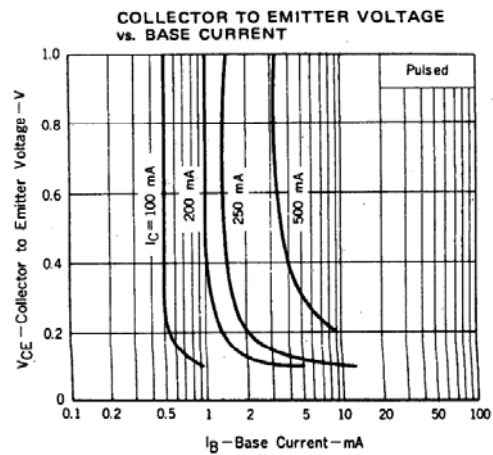
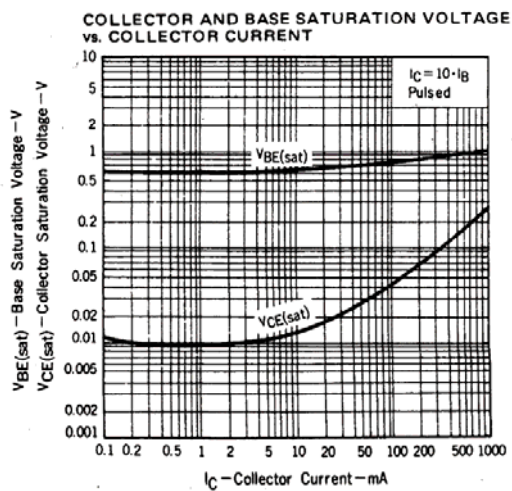
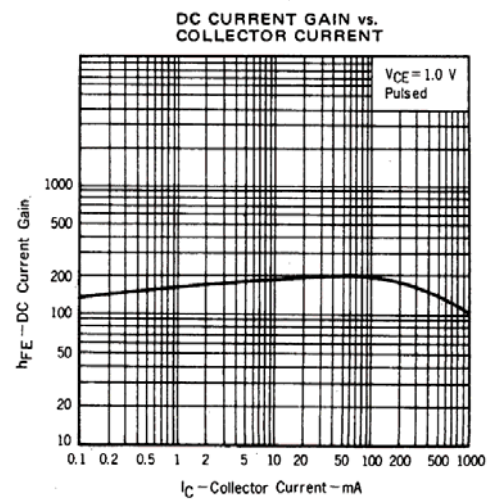
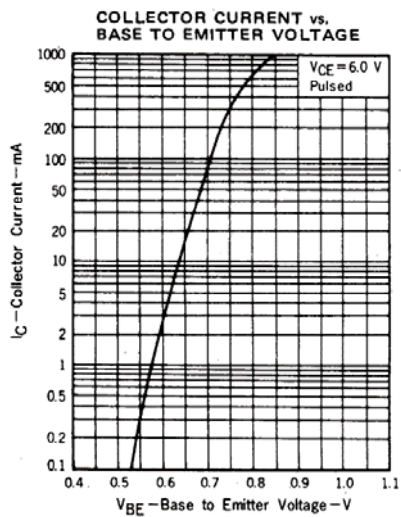
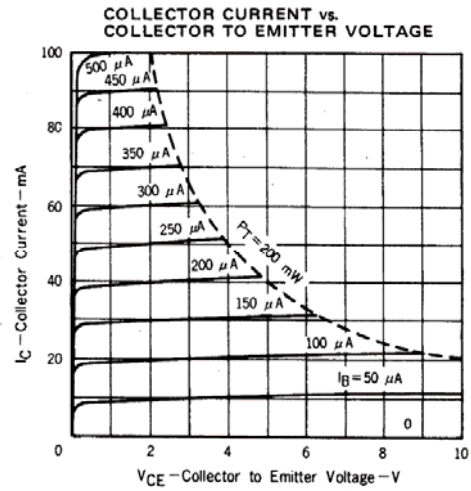
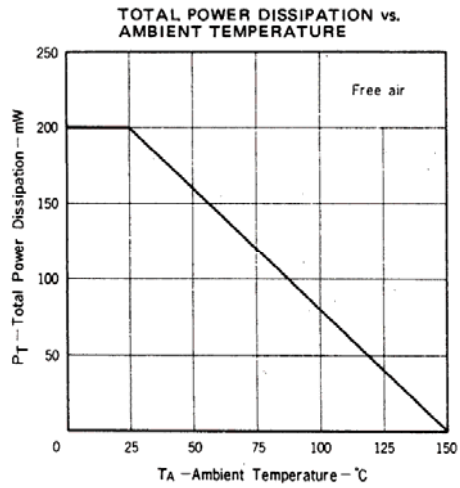
* Pulse test : Pulse width $\leq 350\mu s$, Duty Cycles $\leq 2\%$.

CLASSIFICATION OF $h_{FE(1)}$

Marking	DV1	DV2	DV3	DV4	DV5
Range	110-180	135-220	170-270	200-320	250-400

Typical Characteristics

2SD596



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