

2SD2073

Silicon NPN Epitaxial Planar Type

For low-frequency amplification

■ Features

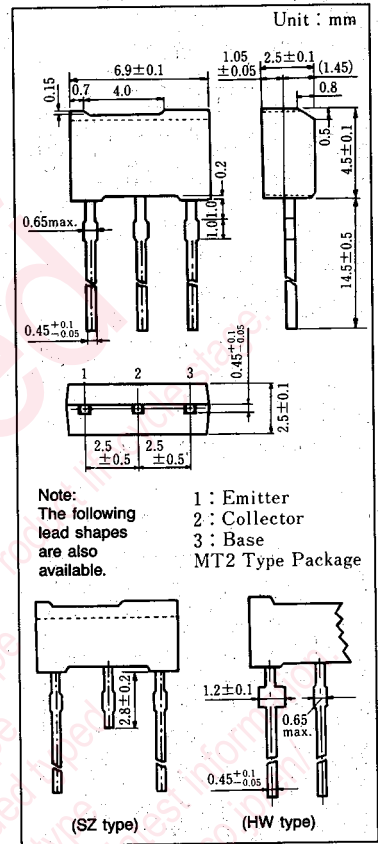
- High DC current gain h_{FE}
- Low collector-emitter saturation voltage $V_{CE(sat)}$
- High emitter-base voltage V_{EBO}
- Low noise NV
- Automatic insertion by radial taping possible

■ Absolute Maximum Ratings ($T_a=25^\circ C$)

Item	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	15	V
Peak Collector Voltage	I_{CP}	100	mA
Collector Current	I_C	50	mA
Collector Power Dissipation	P_C^*	1	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ C$

*Copper foil on PCB against Collector: 1.7mm thick, 1cm² in area

■ Package Dimensions

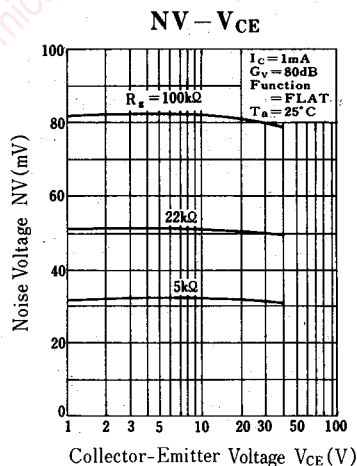
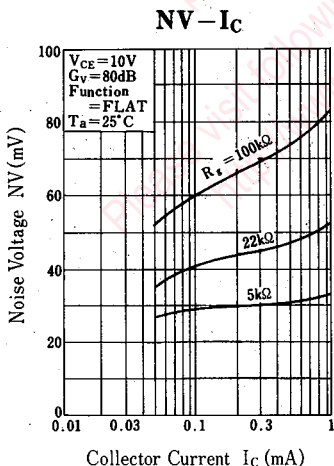
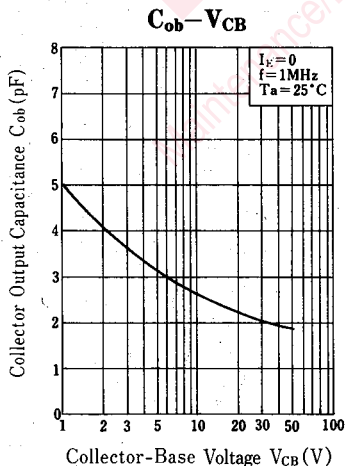
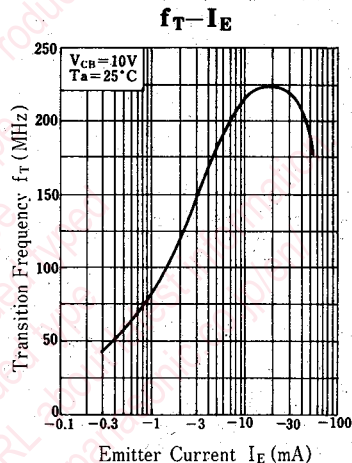
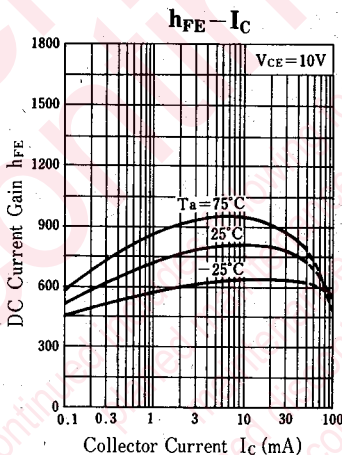
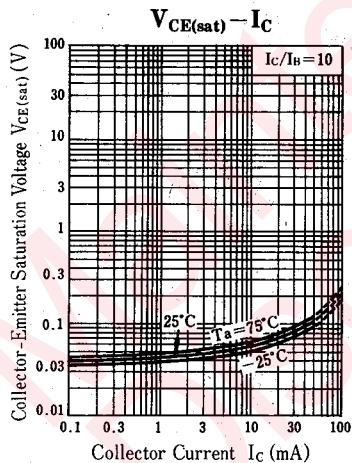
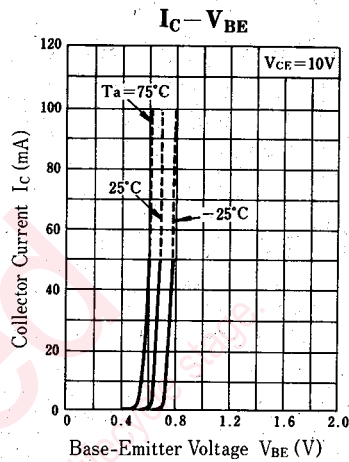
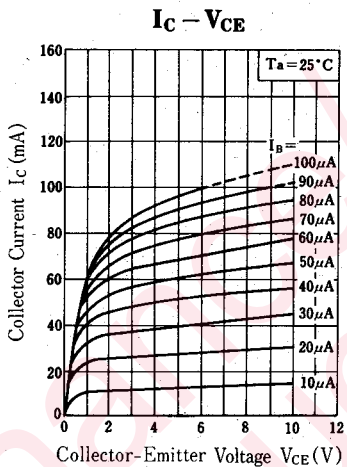
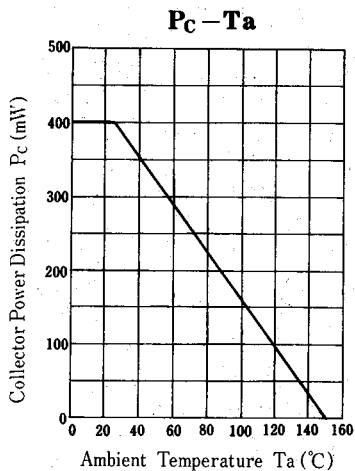


■ Electrical Characteristics ($T_a=25^\circ C$)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=20 V, I_E=0$			100	nA
	I_{CEO}	$V_{CE}=20 V, I_B=0$			1	μA
Collector-Base Voltage	V_{CBO}	$I_C=10 \mu A, I_E=0$	50			V
Collector-Emitter Voltage	V_{CEO}	$I_C=1 mA, I_B=0$	40			V
Emitter-Base Voltage	V_{EBO}	$I_E=10 \mu A, I_C=0$	15			V
DC Current Gain	h_{FE}^*	$V_{CE}=10 V, I_C=2 mA$	400	1000	2000	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10 mA, I_B=1 mA$		0.05	0.2	V
Transition Frequency	NV	$V_{CE}=10 V, I_C=1 mA, G_v=80dB$ $R_g=100 k\Omega, \text{Function}=\text{FLAT}$		80		mV

* h_{FE} Ranking

Rank	R	S	T
h_{FE}	400~800	600~1200	1000~2000



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