

2SD1526

Silicon NPN Epitaxial Planar Type

For low-frequency output amplification

■ Features

- High emitter-base voltage V_{CBO}
- Low collector-emitter saturation voltage $V_{CE(sat)}$
- High gain bandwidth product f_T
- An M type mold package that allows easy manual and automatic insertion.
Can be firmly mounted flush to PCB surface.

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

Item	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	130	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	5	V
Peak Collector Voltage	I_{CP}	1.5	A
Collector Current	I_C	1.0	A
Collector Power Dissipation	P_C^*	1.0	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-55 \sim +150$	$^\circ\text{C}$

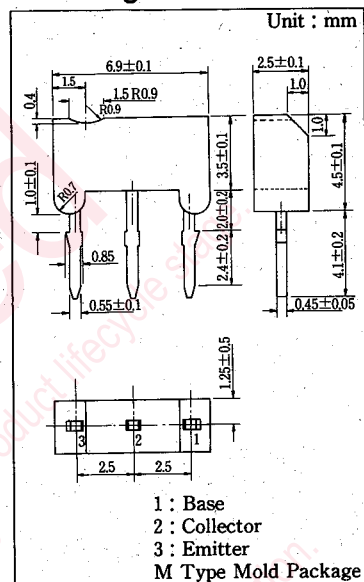
*Copper foil on PCB against Collector: 1.7mm thick, 1cm² in area

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

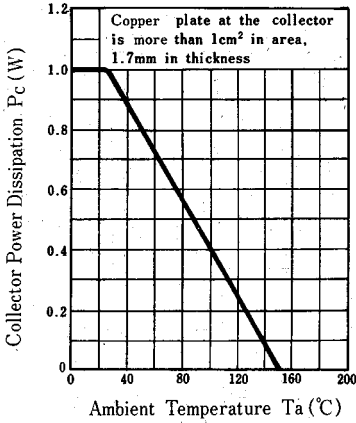
Item	Symbol	Condition	min.	typ.	max.	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=130\text{V}, I_E=0$			0.1	μA
Collector-Base Voltage	V_{CBO}	$I_C=10\mu\text{A}, I_E=0$	130			V
Collector-Emitter Voltage	V_{CEO}	$I_C=2\text{mA}, I_B=0$	40			V
Emitter-Base Voltage	V_{EBO}	$I_E=10\mu\text{A}, I_C=0$	5			V
DC Current Gain	h_{FE1}	$V_{CE}=0.5\text{V}, I_C=1.0\text{A}^*$	150		350	
	h_{FE2}	$V_{CE}=2.0\text{V}, I_C=0.5\text{A}^*$	150			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}^*$			0.5	V
Transition Frequency	f_T	$V_{CB}=10\text{V}, I_E=-50\text{mA}, f=200\text{MHz}$		200		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=20\text{V}, I_E=0, f=1\text{MHz}$			30	pF

*2Pulse Measurement

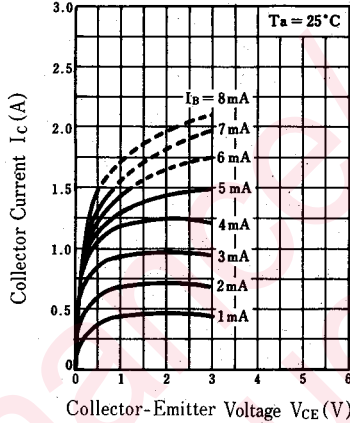
■ Package Dimensions



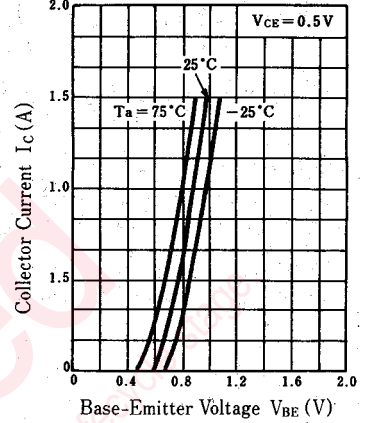
$P_C - T_a$



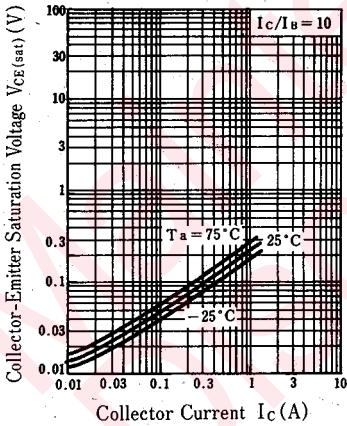
$I_C - V_{CE}$



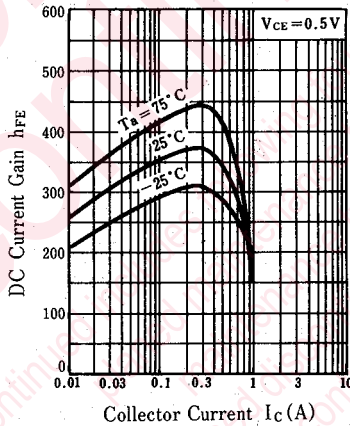
$I_C - V_{BE}$



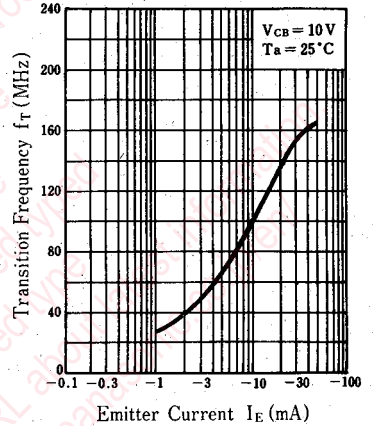
$V_{CE(sat)} - I_C$



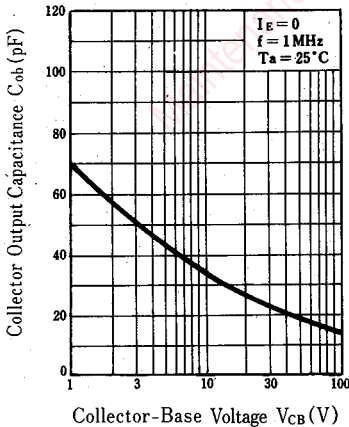
$h_{FE} - I_C$



$f_T - I_E$



$C_{ob} - V_{CB}$



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