

No.3236

2SB1405

PNP Epitaxial Planar Silicon Transistor

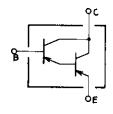
General Driver Applications

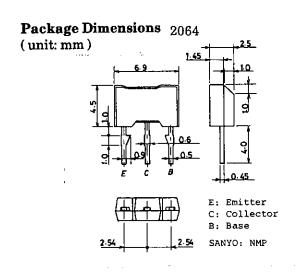
Features

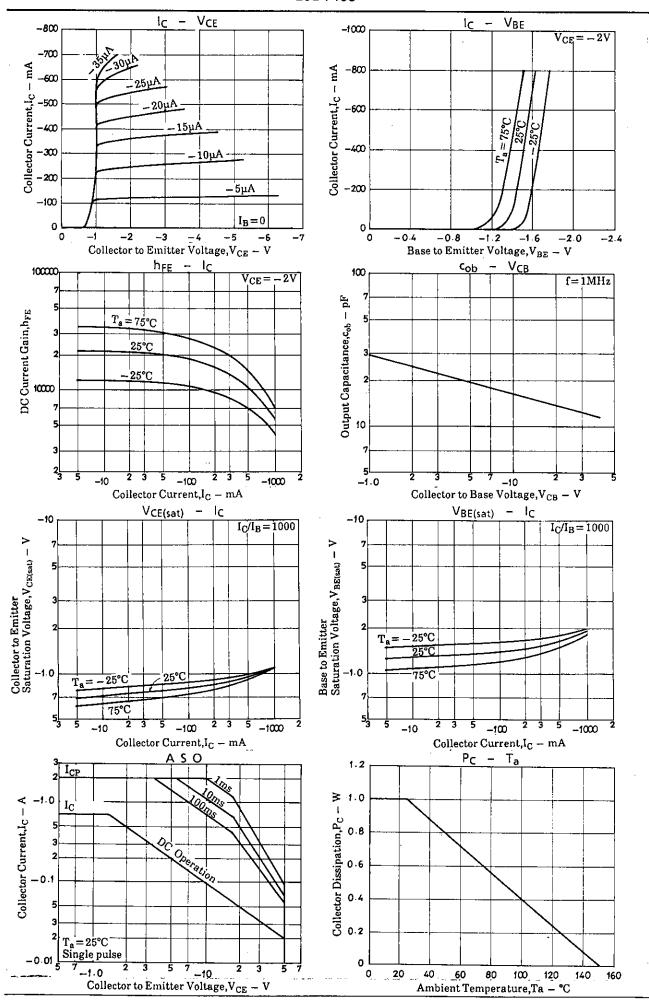
- · Darlington connection
- · High DC current gain
- · Large current capacity, wide ASO

Absolute Maximum Ratings at Ta = 25°C				,	unit	
Collector to Base Voltage	V_{CBO}			-80	V	
Collector to Emitter Voltage				-50	V	
Emitter to Base Voltage	V_{EBO}			-10	V	
Collector Current	$I_{\mathbf{C}}$			-0.7	Α	
Collector Current(Pulse)	I_{CP}			-2	Α	
Collector Dissipation	$\overline{P_C}$			1	W	
Junction Temperature	$\mathbf{T}\mathbf{j}$			150	$^{\circ}\mathrm{C}$	
Storage Temperature	Tstg		-55 to +150 °C			
Electrical Characteristics at	Ta = 25°C		$_{ m min}$	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = -40V, I_E = 0$		- •	-100	пA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -8V, I_C = 0$			-100	nA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = -2V, I_{C} = -50mA$	5000			
	$h_{FE}(2)$	$V_{CE} = -2V, I_{C} = -500 \text{mA}$	3000			
Gain-Bandwidth Product	$\mathbf{f_T}$	$V_{CE} = -5V, I_{C} = -50mA$		170		MHz
Output Capacitance	c_{ob}	$V_{CB} = -10V, f = 1MHz$		18		рF
C-E Saturation Voltage	$V_{\mathrm{CE}(\mathrm{sat})}$	$I_C = -100 \text{mA}, I_B = -0.1 \text{mA}$		-0.8	-1.2	V
B-E Saturation Voltage	$V_{\mathrm{BE}(\mathrm{sat})}$	$I_C = -100 \text{mA}, I_B = -0.1 \text{mA}$		-1.4	-2.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_{\rm C} = -10 \mu {\rm A}, I_{\rm E} = 0$	80			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1 \text{mA,R}_{BE} = \infty$	-50			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10 \mu A, I_C = 0$	-10			V

Electrical Connection







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