

2SC1030

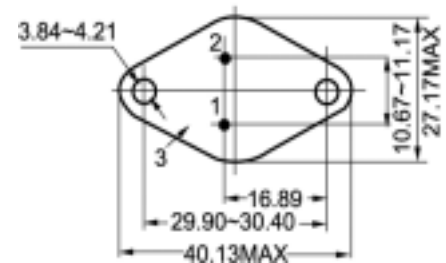
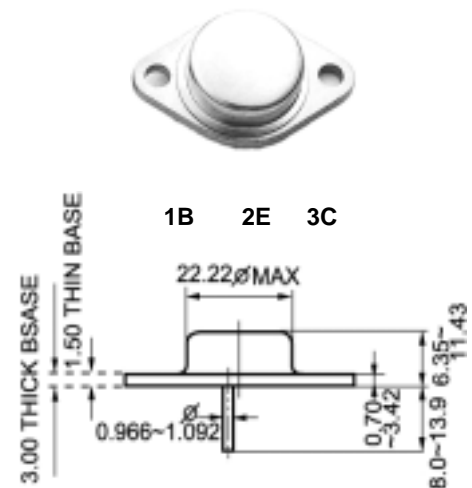
Silicon NPN Transistors

◆ Features

- With TO-3 package
- Low frequency power amplifications

◆ Absolute Maximum Ratings $T_c=25^{\circ}\text{C}$

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to base voltage	150	V
V_{CEO}	Collector to emitter voltage	80	V
V_{EBO}	Emitter to base voltage	6	V
I_C	Collector current-Continuous	6	A
P_D	Total Power Dissipation@ $T_C=25^{\circ}\text{C}$	50	W
T_j	Junction temperature	200	$^{\circ}\text{C}$
T_{stg}	Storage temperature	-55~200	$^{\circ}\text{C}$



TO-3

◆ Electrical Characteristics $T_c=25^{\circ}\text{C}$

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V_{CEO}	Collector-Emitter Sustaining Voltage	$I_C=0.2\text{A}; I_B=0$	80			V
V_{CER}	Collector-Emitter Sustaining Voltage					
I_{CEO}	Collector Cutoff Current	$V_{CE}=30\text{V}; I_B=0$			2.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$			1.0	mA
I_{CBO}	Collector Cutoff Current	$V_{CB}=30\text{V}; I_E=0$			1.0	mA
V_{EBO}	Base-emitter breakdown voltage					
$V_{CE(sat-1)}$	Collector-emitter saturation voltages	$I_C=5.0\text{A}; I_B=1.0\text{A}$			1.5	V
$V_{CE(sat-2)}$	Collector-emitter saturation voltages					
$V_{CE(sat-3)}$	Collector-emitter saturation voltages					
h_{FE-1}	Forward current transfer ratio	$I_C=1\text{A}; V_{CE}=5\text{V}$	35		200	
h_{FE-2}	Forward current transfer ratio	$I_C=5\text{A}; V_{CE}=5\text{V}$	22			
h_{FE-3}	Forward current transfer ratio					
$V_{BE(on)}$	Base-emitter On voltages					
f_T	Current Gain-Bandwidth Product	$I_C=1\text{A}; V_{CE}=5\text{V}$		10		MHz
h_{fe}	Small-Signal Current Gain					