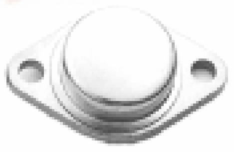
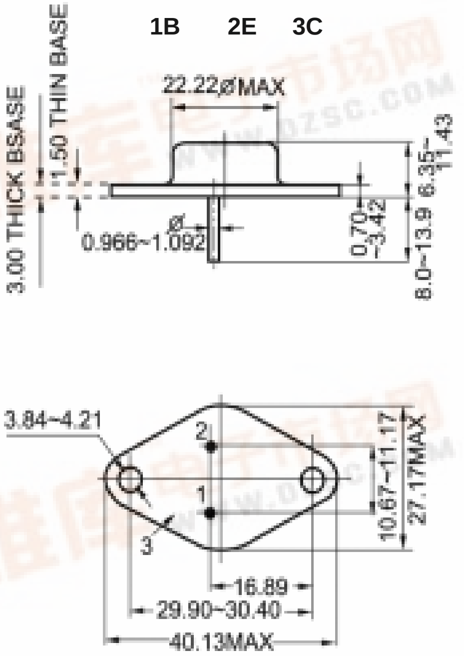
2SC1030

Silicon NPN Transistors



◆ Features

- With TO-3 package
- Low frequency power amplifications



TO-3

◆ Absolute Maximum Ratings Tc=25℃

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@TC=25℃	50	W
T_j	Junction temperature	200	℃
T_{stg}	Storage temperature	-55~200	℃

◆ Electrical Characteristics Tc=25℃

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