

# 2SC1580

Silicon NPN Transistors



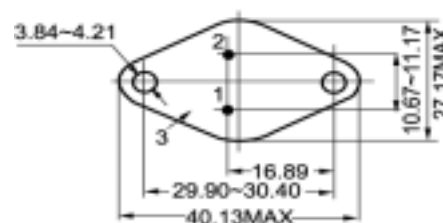
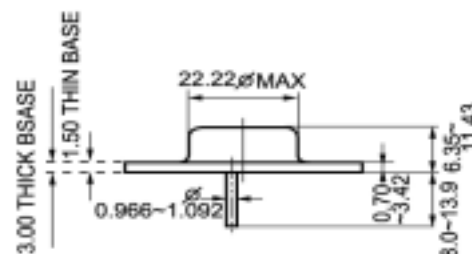
1B 2E 3C

## ◆ Features

- With TO-3 package

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

SYMBOL	PARAMETER	RATING	UNIT
$V_{CB}$	Collector to base voltage	600	V
$V_{CEO}$	Collector to emitter voltage	500	V
$V_{CER}$	Emitter to base voltage		
$V_{EB}$	Emitter to base voltage	5.0	V
$I_B$	Base Current		
$I_C$	Collector current-Continuous	15	A
$P_D$	Total Power Dissipation@ $T_C=25^\circ\text{C}$	150	W
$T_j$	Junction temperature	200	$^\circ\text{C}$
$T_{stg}$	Storage temperature	-65~200	$^\circ\text{C}$



TO-3

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO}$	Collector-Emitter Sustaining Voltage	$I_C=5\text{mA}; I_B=0$	500		V
$V_{CER}$	Collector-Emitter Sustaining Voltage				
$I_{CEO}$	Collector Cutoff Current	$V_{CE}=500\text{V}; I_B=0$		0.5	mA
$I_{CEX}$	Collector Cutoff Current				
$I_{CBO}$	Collector-emitter breakdown voltage	$V_{cb}=600\text{V}; I_E=0$		0.1	mA
$V_{EBO}$	Emitter Cutoff Current				
$V_{CE(sat-1)}$	Collector-emitter saturation voltages	$I_C=6.0\text{A}; I_B=1\text{A}$		5.0	V
$V_{CE(sat-2)}$	Collector-emitter saturation voltages				
$V_{CE(sat-3)}$	Collector-emitter saturation voltages				
$V_{CE(sat-4)}$	Collector-emitter saturation voltages				
$h_{FE-1}$	Forward current transfer ratio	$I_C=4\text{A}; V_{CE}=5\text{V}$	20		
$h_{FE-2}$	Forward current transfer ratio				
$V_{BE(on)}$	Base-emitter On voltages				
$f_T$	Current Gain-Bandwidth Product				
$h_{fe}$	Small-Signal Current Gain				
$f_{hfe}$	Small-Signal Current Gain Cutoff Frequency				