

2N6543

Silicon NPN Transistors

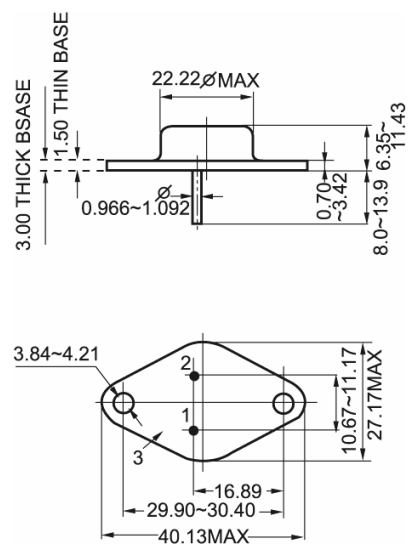


◆ Features

- Intended for high voltage, fast switching applications
- With TO-3 package

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

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to base voltage	850	V
V_{CEO}	Collector to emitter voltage	400	V
V_{EBO}	Emitter to base voltage	9.0	V
I_{CP}	Peak collector current	16	A
I_C	Collector current	5.0	A
P_C	Collector power dissipation	100	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
I_{CBO}	Collector-base cut-off current	$V_{CB}=850\text{V}, V_{BE}=0$		0.5	mA
I_{EBO}	Emitter-base cut-off current	$V_{EB}=9\text{V}; I_C=0$		1.0	mA
I_{CEO}	Collector-emitter cut-off current				
V_{CBO}	Collector-base breakdown voltage				
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=100\text{mA}, I_B=0$	400		V
V_{EBO}	Emitter-base breakdown voltage				
$V_{CEsat-1}$	Collector-emitter saturation voltages	$I_C=5\text{A}; I_B=1\text{A}$		1.5	V
$V_{CEsat-2}$	Collector-emitter saturation voltages	$I_C=8\text{A}; I_B=2\text{A}$		5.0	V
$V_{CEsat-3}$	Collector-emitter saturation voltages				
$V_{CEsat-4}$	Collector-emitter saturation voltages				
h_{FE-1}	Forward current transfer ratio	$I_C=2.5\text{A}, V_{CE}=3\text{V}$	12	60	
h_{FE-2}	Forward current transfer ratio	$I_C=5\text{A}, V_{CE}=3\text{V}$	7.0	35	
h_{FE-3}	Forward current transfer ratio				
h_{FE-4}	Forward current transfer ratio				
$V_{BE(sat)1}$	Base-emitter saturation voltages	$I_C=5\text{A}; I_B=1\text{A}$		1.6	V
$V_{BE(sat)2}$	Base-emitter saturation voltages				
$V_{BE(sat)3}$	Base-emitter saturation voltages				
f_T	Transition frequency at $f = 1\text{MHz}$	$I_C=0.3\text{A}, V_{CE}=10\text{V}$	6.0	24	MHz
t_f	Fall time				
t_s	Turn-off storage time				