2SC3691

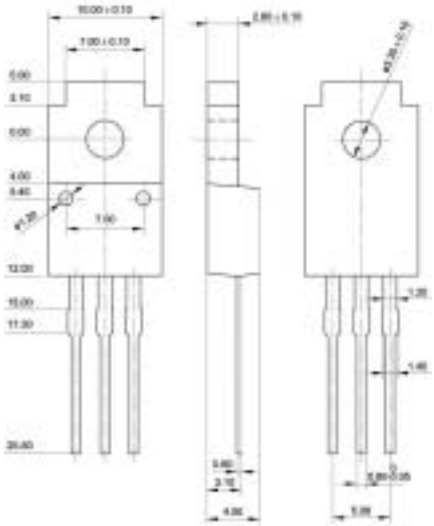
Silicon NPN Transistors

◆ Features

. With TO-220Fa package

. High speed ,power switching applications

B C E



TO-220Fa

◆ Absolute Maximum Ratings Tc=25℃

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to base voltage	100	V
V_{CEO}	Collector to emitter voltage	60	V
V_{EBO}	Emitter to base voltage	5	V
I_C	Collector current	5	A
P_C	Collector power dissipation	25	W
T_j	Junction temperature	150	℃
T_{stg}	Storage temperature	-55~150	℃

◆ Electrical Characteristics Tc=25℃

SYMBOL	PARAMETER	CONDITIONS	MIN	Typ.	MAX	UNIT
I_{CBO}	Collector cut-off current	V_{CB}=60V; I_E=0			10	uA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			10	uA
I_{CEO}	Collector cut-off current					
V_{CBO}	Collector-base breakdown voltage					
$V_{CEO(SUS)}$	Collector-emitter Sustaining voltage	I_C=30mA; I_B=0	60			V
V_{EBO}	Emitter-base breakdown voltage					
$V_{CE(sat-1)}$	Collector-emitter saturation voltages	I_C=4A; I_B=0.2A			0.5	V
$V_{CE(sat-2)}$	Collector-emitter saturation voltages					
h_{FE-1}	Forward current transfer ratio	I_C=1A; V_{CE}=2V	100		400	
h_{FE-2}	Forward current transfer ratio					
$V_{BE(sat)1}$	Base-emitter saturation voltages	I_C=4A; I_B=0.2A			1.5	V
$V_{BE(sat)2}$	Base-emitter saturation voltages					
f_T	Transition frepuency	I_C=0.5A; V_{CE}=10V		150		MHz
C_{ob}	Collector Out put Capacitance	I_C=0, V_{CB}=10V f=1MHz		70		pF