2SC3710

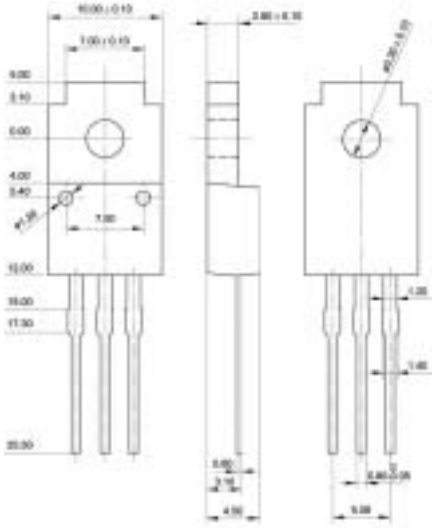
Silicon NPN Transistors



B C E

◆ Features

. With TO-220Fa package
. Complement to type 2SA1452
. Hihg current switching applications



TO-220Fa

◆ Absolute Maximum Ratings Tc=25℃

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to base voltage	80	V
V_{CEO}	Collector to emitter voltage	80	V
V_{EBO}	Emitter to base voltage	6	V
I_B	Base current	2	A
I_C	Collector current	12	A
P_C	Collector power dissipation	30	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}=80V; I_E=0			10	uA
I_{EBO}	Emitter cut-off current	V_{EB}=6V; I_C=0			10	uA
V_{CBO}	Collector-base breakdown voltage					
V_{CEO}	Collector-emitter breakdown voltage	I_C=50mA; I_B=0	80			V
V_{EBO}	Emitter-base breakdown voltage					
$V_{CE(sat-1)}$	Collector-emitter saturation voltages	I_C=6A; I_B=0.3A			0.4	V
$V_{CE(sat-2)}$	Collector-emitter saturation voltages					
h_{FE-1}	Forward current transfer ratio	I_C=1A; V_{CE}=1V	70		240	
h_{FE-2}	Forward current transfer ratio	I_C=6A; V_{CE}=1V	40			
$V_{BE(sat-1)}$	Base-emitter saturation voltages	I_C=6A; I_B=0.3A			1.2	V
$V_{BE(sat-2)}$	Base-emitter saturation voltages					
f_T	Transition frepuency	I_C=1A; V_{CE}=5V		80		MHz
C_{ob}	Collector Out put Capacitance	V_{CB}=10V;f=1MHz		220		pF

◆ h_{FE-1} Classifications

O	Y
70-140	120-240