KI SEMICONDUCTOR.

NPN SILICON TRANSISTOR

C3198

APPLICATIONS

General Purpose And Switching Applications.

ABSOLUTE MAXIMUM RATINGS（T_a=25℃）

T_{stg}——Storage Temperature…… -55~150℃

T_j——Junction Temperature……150℃

P_C——Collector Dissipation……400mW

V_{CBO}——Collector-Base Voltage……60V

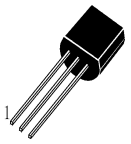
V_{CEO}——Collector-Emitter Voltage……50V

V_{EBO}——Emitter-Base Voltage……5V

I_C——Collector Current……150mA

Ib——Base Current……50mA

TO-92



1－Emitter，E
2－Collector，C
3－Base，B

ELECTRICAL CHARACTERISTICS（T_a=25℃）

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
I_{CBO}	Collector Cut-off Current			100	nA	V_{CB}=60V, I_E=0
I_{EBO}	Emitter Cut-off Current			100	nA	V_{EB}=5V, I_C=0
$H_{FE(1)}$	DC Current Gain	70		700		V_{CE}=6V, I_C=2mA
$H_{FE(2)}$	DC Current Gain	25	100			V_{CE}=6V, I_C=150mA
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage		0.1	0.25	V	I_C=100mA, I_B=10mA
$V_{BE(sat)}$	Base-Emitter Saturation Voltage			1.0	V	I_C=100mA, I_B=10mA
f_T	Current Gain-Bandwidth Product	80			MHz	V_{CE}=10V, I_C=1mA
Cob	Output Capacitance		2.0	3.5	pF	V_{CB}=10V, I_E=0，f=1MHz
NF	Noise Figure		1.0	10	dB	V_{CE}=6V, I_C=100μA f=1KHz,Rg=10KΩ

h_{FE} Classification

O	Y	GR	BL
70—140	120—240	200—400	350—700