Silicon NPN Power Transistor BU603

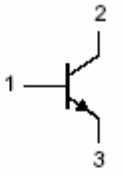
DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = 550V(Min)
- High Switching Speed

APPLICATIONS

- Designed for use in power supplies and deflection circuits for color receivers and monitors

1 2 3



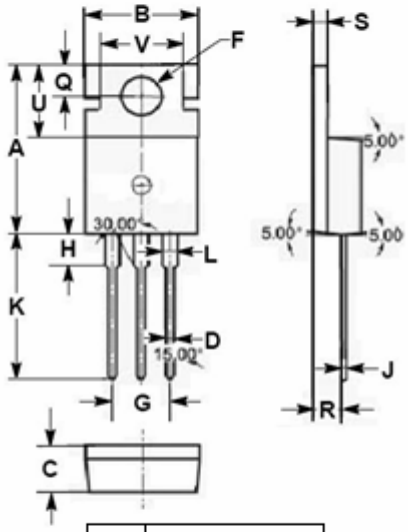
PIN 1. BASE
2. COLLECTOR
3. EMITTER
TO-220C package

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage-V_{BE}= 0	1350	V
V_{CEO}	Collector-Emitter Voltage	550	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current-Continuous	2	A
I_{BM}	Base Current-Peak	4	A
I_E	Emitter Current-Continuous	7	A
I_{EM}	Emitter Current-Peak	12	A
P_C	Collector Power Dissipation T_C=25℃	100	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Ttemperature Range	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.25	℃/W



DIM	mm MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 100mA; I_B= 0	550			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 0.33A			2	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 4A; I_B= 1.33A			3	V
I_{CES}	Collector Cutoff Current	V_{CE}= V_{CESmax}; V_{BE}= 0 V_{CE}= V_{CESmax}; V_{BE}= 0;T_J= 125℃			1 2	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C= 0			1	mA
h_{FE-1}	DC Current Gain	I_C= 10mA ; V_{CE}= 5V	6			
h_{FE-2}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	8			
h_{FE-3}	DC Current Gain	I_C= 2A ; V_{CE}= 2V	6			
h_{FE-4}	DC Current Gain	I_C= 4A ; V_{CE}= 3V	3			
Switching Times; Resistive Load						
t_{on}	Turn-On Time	I_C= 2A; I_{B1}= -I_{B2}= 0.33A			0.5	μs
t_s	Storage Time				6.0	μs
t_f	Fall Time				0.7	μs