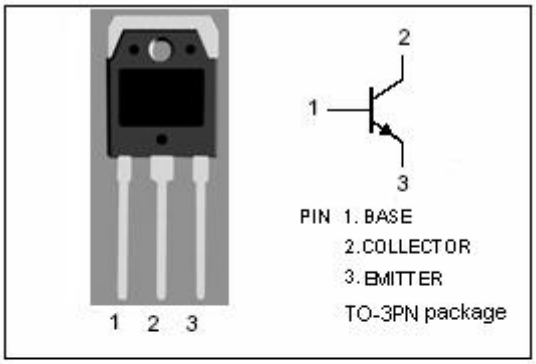
isc Silicon NPN Power Transistor — 2SC3685

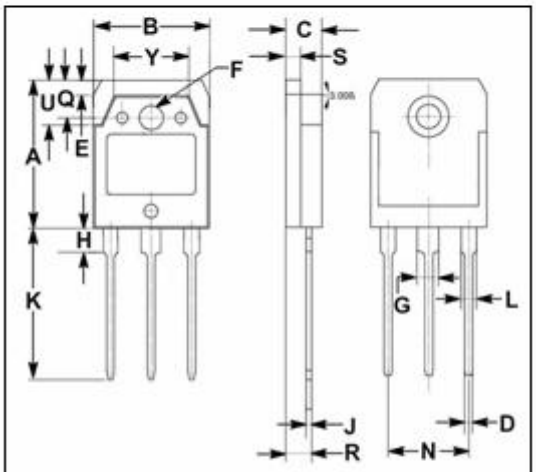


DESCRIPTION

- High Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 800V(Min)
- High Switching Speed
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for ultrahigh-definition color display horizontal deflection output applications.



DIM	mm MIN	mm MAX
A	19.60	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	20.00	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.10
Y	9.90	10.10

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base voltage	6	V
I_C	Collector Current-Continuous	6	A
I_{CM}	Collector Current-Peak	16	A
P_C	Collector Power Dissipation @ T_C=25℃	125	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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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= 10mA; I_B = 0	800			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 4A; I_B= 1A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 4A; I_B= 1A			1.5	V
I_{CES}	Collector Cutoff Current	V_{CE}= 1500V; R_{BE}= 0			1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			1	mA
h_{FE}	DC Current Gain	I_C= 1A; V_{CE}= 5V	8			
Switching Times						
t_{stg}	Storage Time	I_C= 4A, I_{B1}= 0.8A; I_{B2}= -1.6A			3.0	μs
t_f	Fall Time				0.2	μs