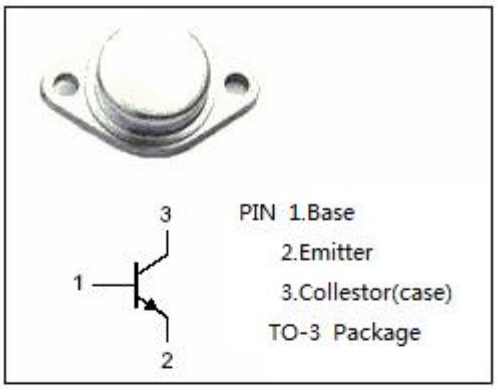
isc Silicon NPN Power Transistor 2N6580

DESCRIPTION

- Excellent Safe Operating Area
- High Voltage,High Speed
- Low Saturation Voltage
- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 400V(Min)



APPLICATIONS

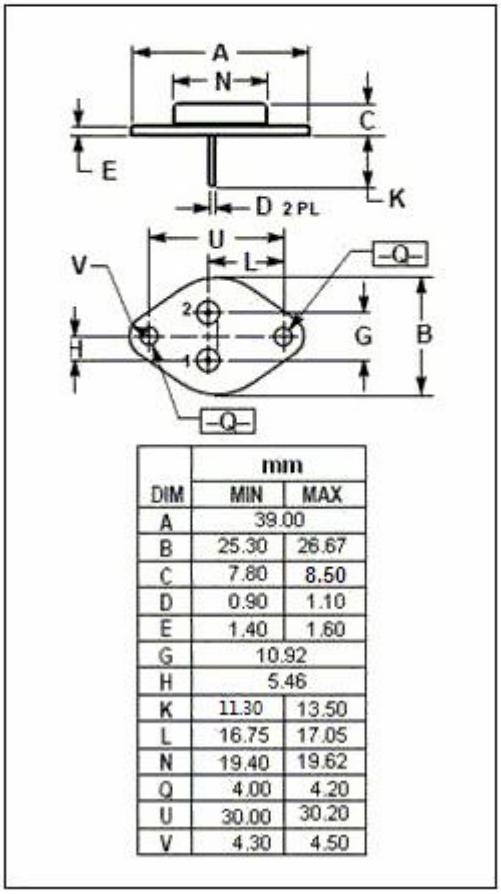
- Off-line power supplies
- Switching amplifiers
- Inverters/Converters
- Motor speed control circuits
- Switching regulator
- Solenoid& relay drivers

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	9.0	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Peak	16	A
I_B	Base Current-Continuous	5	A
P_C	Collector Power Dissipation@T_C=25℃	125	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.4	℃/W



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA; I_B= 0	400		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 1A		1.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B= 5A		3.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 5A; I_B= 1A		1.5	V
I_{EBO}	Emitter Cutoff Current	V_{EB}= 9.0V; I_C= 0		0.1	mA
h_{FE}	DC Current Gain	I_C= 5A ; V_{CE}= 3V	7	35	
f_T	Current Gain-Bandwidth Product	I_C= 1A ; V_{CE}= 10V; f_{test}=10MHz	12.5	50	MHz
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f_{test}=1.0MHz	75	250	pF
Switching times-Resistive Load					
t_d	Delay Time	I_C= 5A, I_{B1}= -I_{B2}= 1A, V_{CC}= 150V; R= 30Ω t_p=100μs; Duty Cycle≤2.0%		0.05	μs
t_r	Rise Time			0.5	μs
t_s	Storage Time			2.0	μs
t_f	Fall Time			0.5	μs