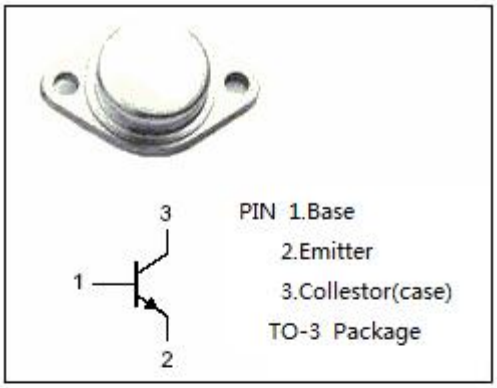
isc Silicon NPN Power Transistor 2N6583

DESCRIPTION

- Excellent Safe Operating Area
- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = 400V(Min)
- High Current Capability
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 1.5 V(Max)@ I_C = 10A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

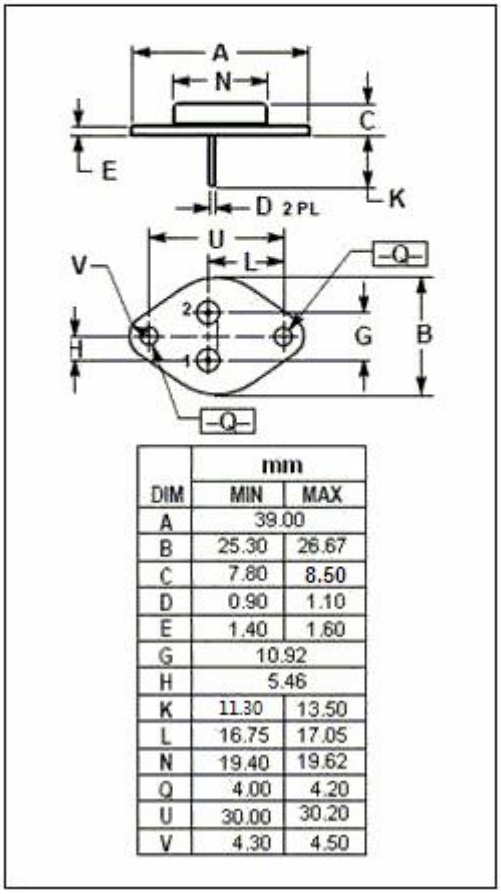
- Designed for linear amplifiers, series pass regulators, and inductive switching applications.

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	V
I_C	Collector Current-Continuous	10	A
P_C	Collector Power Dissipation@T_C=25℃	125	W
T_J	Junction Temperature	200	℃
T_{stg}	Storage Temperature	-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.17	℃/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	TYP	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA; I_B= 0	400			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B= 1.0A			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 10A; I_B= 1.0A			2.0	V
I_{CEO}	Collector Cutoff Current	V_{CE}= 400V; I_B= 0			1.0	mA
I_{CBO}	Collector Cutoff Current	V_{CB}= 500V ; I_E= 0			1.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 9V; I_C=0			0.1	mA
h_{FE-1}	DC Current Gain	I_C= 5A ; V_{CE}= 3V	7		35	
h_{FE-2}	DC Current Gain	I_C= 10A ; V_{CE}= 3V	5			
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A; V_{CE}= 10V		25		MHz
C_{OB}	Output Capacitance	I_E= 0;V_{CB}= 10V; f_{test}=1MHz		250		pF