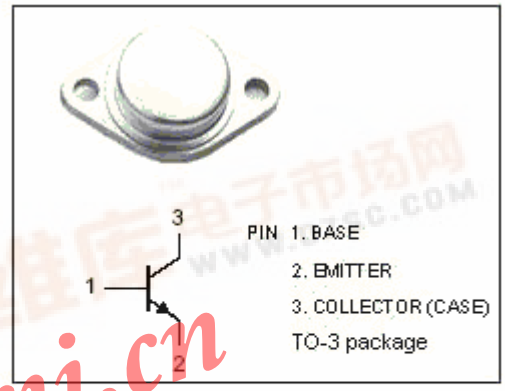
isc Silicon NPN Power Transistor 2SC2292

DESCRIPTION

- High Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 400V (Min)
- High Switching Speed

APPLICATIONS

- Power switching
- Power amplification
- Power driver

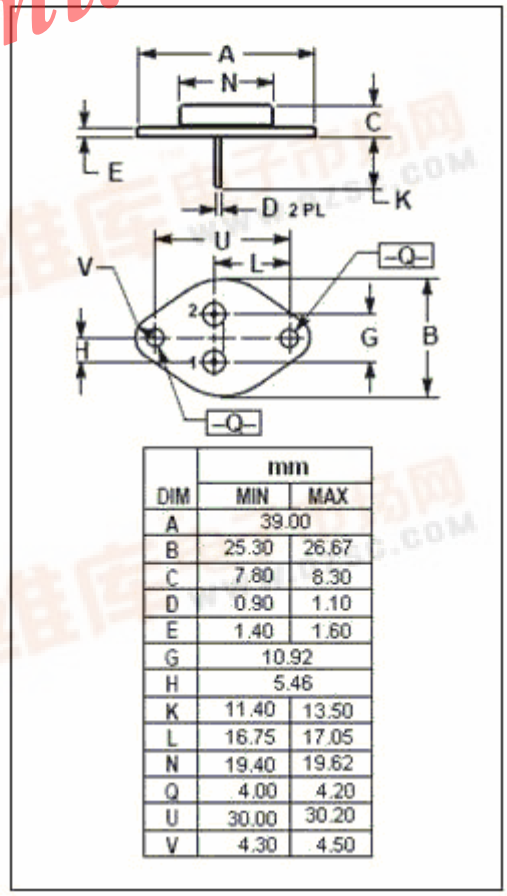


ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	8	A
I_{CM}	Collector Current-Peak	16	A
I_B	Base Current-Continuous	4	A
I_{BM}	Base Current-Peak	8	A
P_C	Collector Power Dissipation @T_C=25℃	80	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.56	℃/W



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.30
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.40	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 Sustainig Voltage	I_C= 200mA; I_B= 0	400			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 4A; I_B= 0.4A			0.7	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 4A; I_B= 0.4A			1.5	V
h_{FE-1}	DC Current Gain	I_C= 4A; V_{CE}= 2V	15			
h_{FE-2}	DC Current Gain	I_C= 8A; V_{CE}= 2V	8			
I_{CBO}	Collector Cutoff Current	V_{CB}= 500V; I_E= 0			0.1	mA
I_{CEO}	Collector Cutoff Current	V_{CE}= 400V; I_B= 0			0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0			1.0	mA
f_T	Current-Gain—Bandwidth Product	I_C= 1A; V_{CE}= 10V		20		MHz

Switching Times

t_{on}	Turn-On Time	I_C=4A; I_{B1}=- I_{B2}= 0.8A; R_L= 5Ω; V_{BB2}= 4V			1.0	μs
t_{stg}	Storage Time				3.0	μs
t_f	Fall Time				0.7	μs