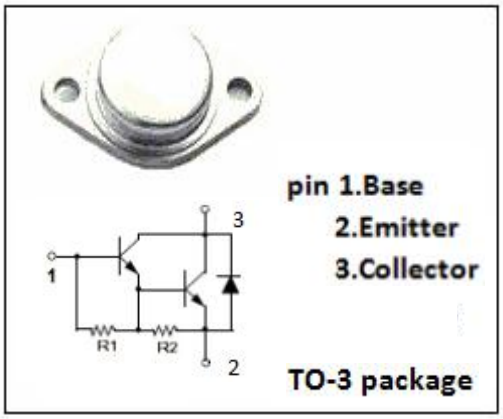
isc Silicon NPN Power Transistor 2N6578

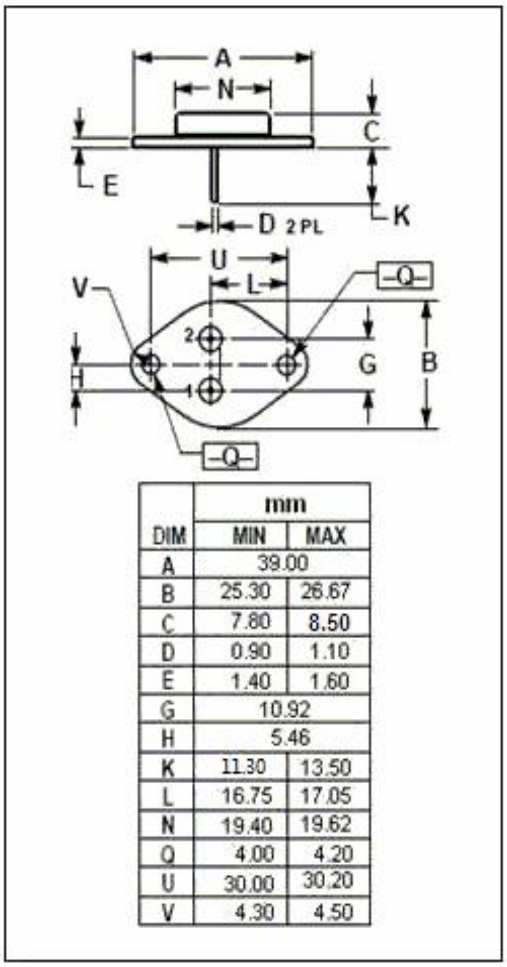
DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$=120V(Min)
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 4.0V(Max) @I_C=15A

APPLICATIONS

- Designed for power amplifier,high speed switching and regulated power supply applications.





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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	120	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	15	A
P_C	Collector Power Dissipation	120	W
T_J	Junction Temperature	175	℃
T_{stg}	Storage Temperature Range	-55~175	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.46	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C=0.2mA; I_B= 0	120	--	--	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 120V; Ib=0	--	--	0.5	mA
I_{CEO}	Collector Cutoff Current	V_{CE}= 120V; Ib=0	--	--	1.0	mA
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 15A; I_B= 0.15A	--	--	4.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B=0.1A	--	--	2.8	V
$V_{BE(sat)-1}$	Base -Emitter Saturation Voltage	I_C= 15A; I_B= 0.15A	--	--	4.5	V
$V_{BE(sat)-2}$	Base -Emitter Saturation Voltage	I_C= 10A; I_B=0.1A	--	--	3.5	V
h_{FE}	DC Current Gain	I_C= 15A; V_{CE}= 4V	100	--	--	
h_{FE}	DC Current Gain	I_C= 10A; V_{CE}= 3V	500	--	5000	
h_{FE}	DC Current Gain	I_C= 4A; V_{CE}= 3V	2000	--	20000	
h_{FE}	DC Current Gain	I_C= 0.4A; V_{CE}= 3V	200	--	--	