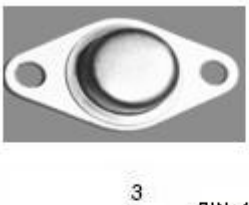
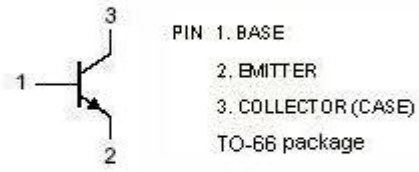
isc Silicon NPN Power Transistor 2N6078

DESCRIPTION

- Low Collector-Emitter Sustaining Voltage
- High voltage
- Low Collector-Emitter Saturation Voltage-
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



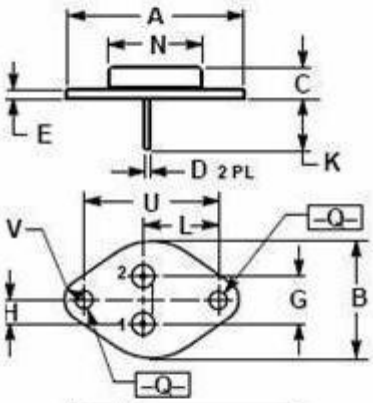


APPLICATIONS

- Linear applications
- Power switching circuits

ABSOLUTE MAXIMUM RATINGS (T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	275	V
V_{CEO}	Collector-Emitter Voltage	250	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current	7	A
I_{CM}	Collector Current-peak	10	A
I_B	Base Current	4	A
PC	Collector Power Dissipation @TC=25℃	45	W
Tj	Junction Temperature	200	℃
T_{stg}	Storage Temperature Range	-65~200	℃



DIM	mm MIN	MAX
A	31.40	31.80
B	17.30	17.70
C	6.70	7.10
D	0.70	0.90
E	1.40	1.60
G	5.08	
H	2.54	
K	9.80	10.20
L	14.70	14.90
N	12.40	12.60
Q	3.60	3.80
U	24.30	24.50
V	3.50	3.70

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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= 200mA; I_B= 0	250			V
$V_{CE(sat)-1}$*	Collector-Emitter Saturation Voltage	I_C= 1.2A; I_B= 0.2A			0.5	V
$V_{CE(sat)-2}$*	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 1.0A			3	V
$V_{BE(sat)-1}$*	Base-Emitter Saturation Voltage	I_C= 1.2A; I_B= 0.2A			1.6	V
$V_{BE(sat)-2}$*	Base-Emitter Saturation Voltage	I_C= 5A; I_B= 1.0A			2.0	V
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C= 0			0.1	mA
h_{FE}	DC Current Gain	I_C= 1.2A; V_{CE}= 1V	12	28	70	
C_{OB}	Output Capacitance	V_{CB}= 10V;I_E= 0; f= 1MHz		150		pF

*:Pulse test:Pulse width=300us,duty cycle≤2%