

isc Silicon NPN Power Transistor

2N6078

DESCRIPTION

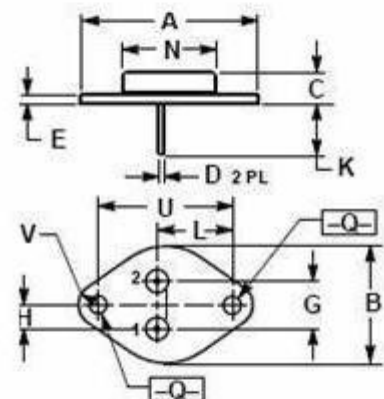
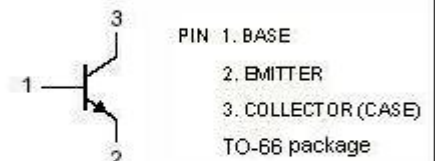
- Low Collector-Emitter Sustaining Voltage
- High voltage
- Low Collector-Emitter Saturation Voltage-
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Linear applications
- Power switching circuits

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

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°C	45	W
T _j	Junction Temperature	200	°C
T _{stg}	Storage Temperature Range	-65~200	°C



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

isc Silicon NPN Power Transistor**2N6078****ELECTRICAL CHARACTERISTICS****T_C=25°C 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 _{EB0}	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 cycles≤2%

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