

isc Silicon NPN Power Transistor

2SC1828

DESCRIPTION

- With TO-66 Package
- Low collector saturation voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

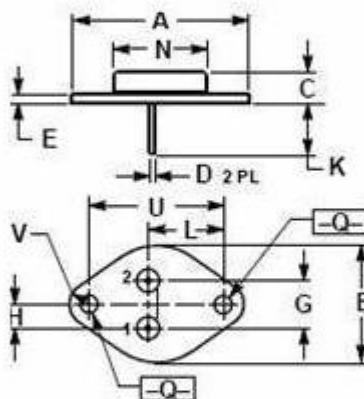
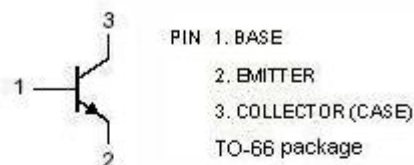
- Designed for switching and wide-band amplifier applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	800	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	1.0	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	40	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	3.125	$^{\circ}\text{C/W}$



DIM	mm	
	MIN	MAX
A	31.40	31.80
B	17.30	17.90
C	6.70	7.10
D	0.70	0.90
E	1.40	1.80
G	5.08	
H	2.54	
K	9.80	10.50
L	14.70	14.90
N	12.40	12.70
Q	3.60	3.80
U	24.30	24.50
V	3.50	3.70

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ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=1\text{A}; I_B=0.2\text{A}$		1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=1\text{A}; I_B=0.2\text{A}$		1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=800\text{V}; I_B=0$		100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$		100	μA
h_{FE}	DC Current Gain	$I_C=200\text{mA}; V_{CE}=10\text{V}$	30	200	

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