

isc Silicon NPN Power Transistor

2SC1444

DESCRIPTION

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

APPLICATIONS

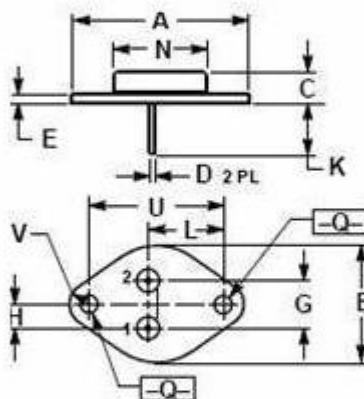
- Designed for switching and wide-band amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	6	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	40	W
T_J	Junction Temperature	-65~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}\text{C}$

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

isc Silicon NPN Power Transistor**2SC1444****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=6\text{A}; I_B=1\text{A}$		1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=80\text{V}; I_B=0$		100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$		100	μA
h_{FE-1}	DC Current Gain	$I_C=1\text{A}; V_{CE}=4\text{V}$	30		
h_{FE-2}	DC Current Gain	$I_C=3\text{A}; V_{CE}=4\text{V}$	15		
f_T	Current-Gain—Bandwidth Product	$I_C=0.5\text{A}; V_{CE}=10\text{V}, f_{test}=1.0\text{MHz}$	10		MHz

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