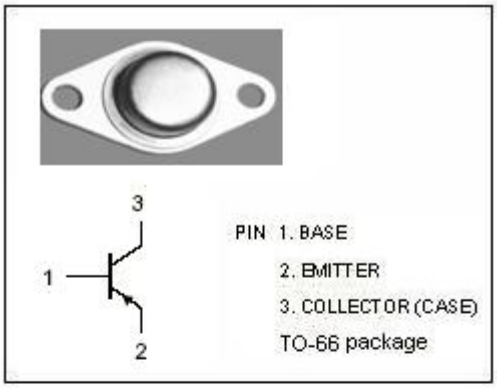
isc Silicon PNP Power Transistor 2N5744

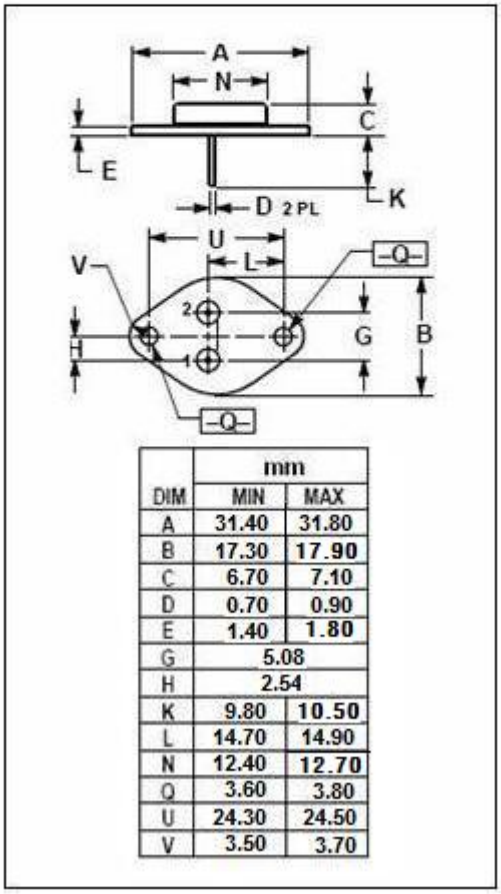
DESCRIPTION

- Excellent Safe Operating Area
- Low Collector-Emitter Saturation Voltage
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for general purpose switching and power amplifier applications



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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-20	A
P_C	Collector Power Dissipation@T_C=100℃	25	W
T_J, T_{stg}	Operating and Storage Junction Temperature Range	-65~+200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	7	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= -10A; I_B= -1.0A		-1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= -20A; I_B= -4.0A		-3.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -10A; I_B= -1.0A		-1.8	V
$V_{BE(ON)}$	Base-Emitter On Voltage	I_C=-10A;V_{CE}= -5V		-1.5	V
I_{CEO}	Collector Cutoff Current	V_{CE}= -100V; I_B=0		-0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C=0		-0.1	mA
h_{FE-1}	DC Current Gain	I_C= -10A ; V_{CE}= -5V	20	80	
h_{FE-2}	DC Current Gain	I_C= -20A ; V_{CE}= -5V	10		