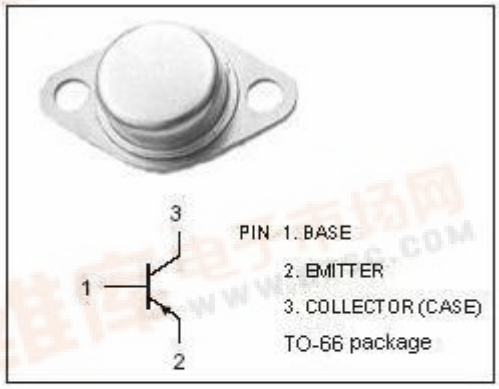
isc Silicon PNP Power Transistors 2N5740

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= -100V(Min.)
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= -0.5V(Max.)@ I_C= -5A
- Wide Area of Safe Operation

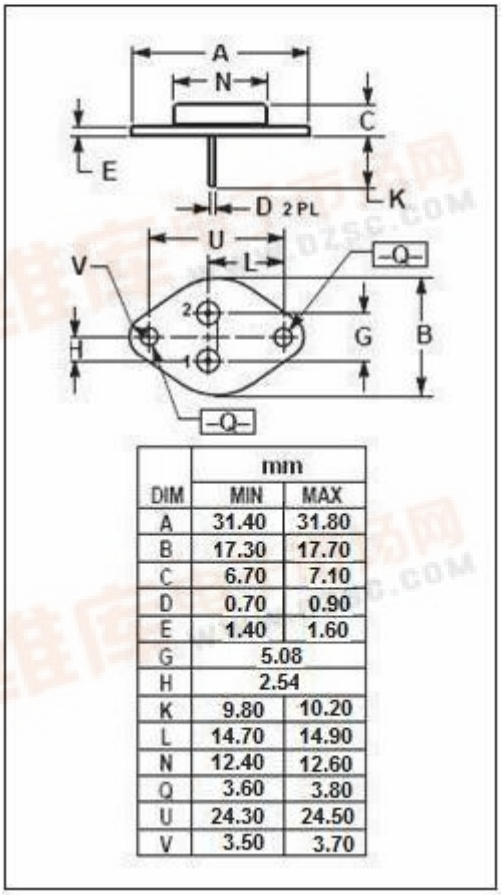


APPLICATIONS

- Designed for general-purpose power amplifier and switching applications.

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	-10	A
I_{CM}	Collector Current-Peak	-20	A
I_B	Base Current-Continuous	-4	A
P_C	Collector Power Dissipation @T_C=100℃	20	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-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

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	4.56	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= -200mA ; I_B= 0	-100		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= -5A; I_B= -0.5A		-0.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= -10A; I_B= -2.5A		-3.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -5A; I_B= -0.5A		-1.2	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -4A; V_{CE}= -4V		-1.5	V
I_{CEO}	Collector Cutoff Current	V_{CE}= -100V; I_B= 0		-0.5	mA
I_{CBO}	Collector Cutoff Current	V_{CB}= -100V; I_E= 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= -5A; V_{CE}= -5V	20	80	
h_{FE-2}	DC Current Gain	I_C= -10A; V_{CE}= -5V	4		
f_T	Current-Gain—Bandwidth Product	I_C= -0.5A; V_{CE}= -10V	10		MHz