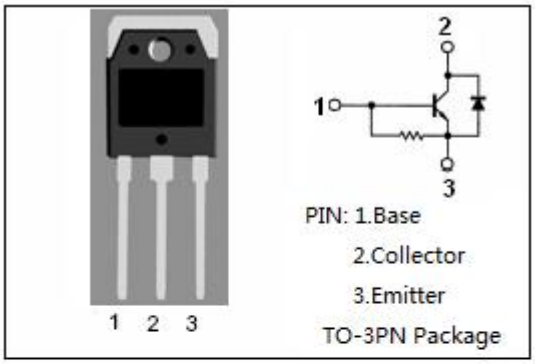
isc Silicon NPN Power Transistor — 2SC4744



DESCRIPTION

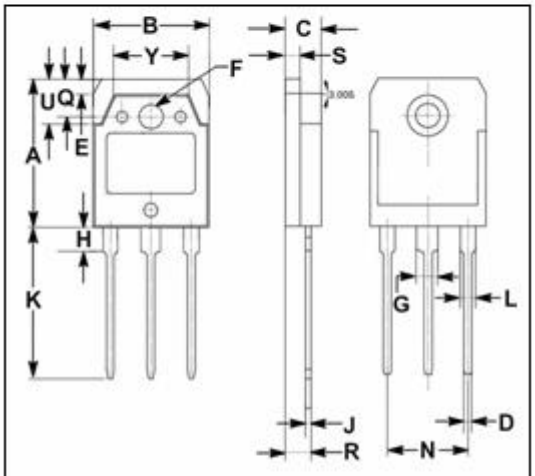
- High Breakdown Voltage-
  : V_{CBO}= 1500V (Min)
- High Switching Speed
- Built-in Damper Diode
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for character display horizontal deflection output stage applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	1500	V
V_{EBO}	Emitter-Base Voltage	6	V
$I_{C(peak)}$	Collector Current-Peak	7	A
$I_{C(surge)}$	Collector Current-Surge	16	A
I_D	C-E Diode Forward Current	7	A
P_C	Collector Power Dissipation @ T_C=25℃	50	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	19.60	20.30
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 400mA ; I_C= 0	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 1.25A			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 5A; I_B= 1.25A			1.5	V
I_{CES}	Collector Cutoff Current	V_{CE}= 1500V ; R_{BE}= 0			500	μA
h_{FE}	DC Current Gain	I_C= 1A ; V_{CE}= 5V			25	
V_{ECF}	C-E Diode Forward Voltage	I_F= 6A			2.0	V
t_f	Fall Time	I_{CP}= 5A , I_{B1}= 1A; I_{B2}= -2A			0.4	μs