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Silicon NPN Power Transistor

2SC4744

DESCRIPTION

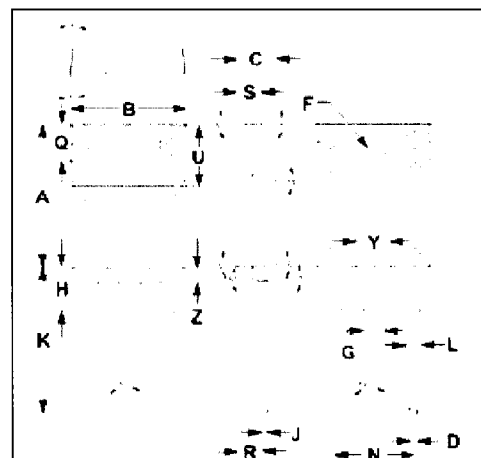
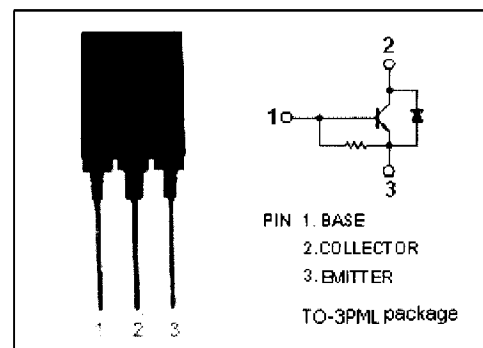
- High Breakdown Voltage-
: $V_{CBO} = 1500V$ (Min)
- High Switching Speed
- Built-in Damper Diode

APPLICATIONS

- Designed for character display horizontal deflection output stage applications

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

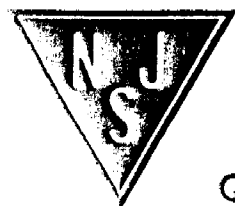
SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	1500	V
V_{EBO}	Emitter-Base Voltage	6	V
$I_{C(peak)}$	Collector Current-Peak	7	A
$I_{C(surge)}$	Collector Current-Surge	16	A
I_D	C-E Diode Forward Current	7	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	50	W
T_J	Junction Temperature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



DIM	mm	
	MIN	MAX
A	19.90	20.10
B	15.90	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.10
H	5.90	6.10
J	0.595	0.605
K	22.30	22.50
L	1.90	2.10
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.40
U	9.90	10.10
Y	4.70	4.90
Z	1.90	2.10

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Quality Semi-Conductors



Silicon NPN Power Transistor**2SC4744****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

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