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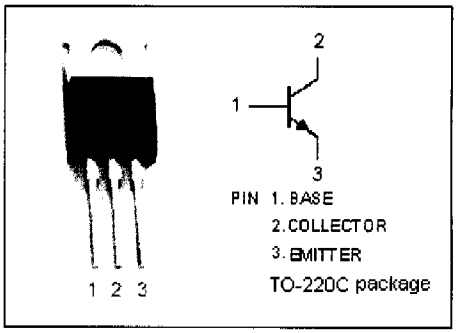
Silicon NPN Power Transistors

D44TD3/4/5

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = 300V(Min)- D44TD3
  = 350V(Min)- D44TD4
  = 400V(Min)- D44TD5
- High Switching Speed
- Low Saturation Voltage

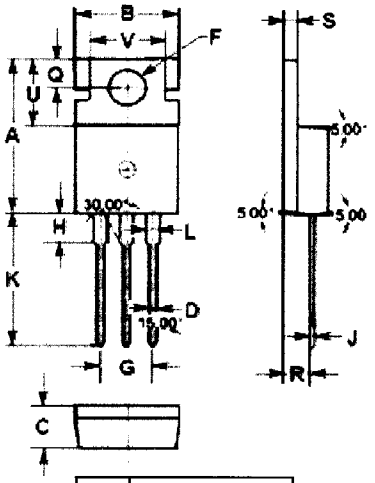


APPLICATIONS

- Designed for switching regulators, high resolution deflection circuits, inverters and motor drivers.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CEV}	Collector-Emitter Voltage	D44TD3	400	V
		D44TD4	500	
		D44TD5	600	
V_{CEO}	Collector-Emitter Voltage	D44TD3	300	V
		D44TD4	350	
		D44TD5	400	
V_{EBO}	Emitter-Base Voltage		5	V
I_C	Collector Current-Continuous		4	A
I_{CM}	Collector Current-Peak		8	A
P_C	Collector Power Dissipation @ T_C=25℃		50	W
T_J	Junction Temperature		150	℃
T_{stg}	Storage Temperature Range		-65~150	℃



DIM	mm MIN	mm MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	1.56	℃/W

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	D44TD3	I_C= 0.1A ;I_B= 0	300		V
		D44TD4		350		
		D44TD5		400		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage		I_C= 2A; I_B= 0.4A		1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage		I_C= 2A; I_B= 0.4A		1.5	V
I_{CEV}	Collector Cutoff Current	D44TD3	V_{CE}= 400V;$V_{BE(off)}$= 1.5V		0.1	mA
		D44TD4	V_{CE}= 500V;$V_{BE(off)}$= 1.5V		0.1	
		D44TD5	V_{CE}= 600V;$V_{BE(off)}$= 1.5V		0.1	
I_{EBO}	Emitter Cutoff Current		V_{EB}= 6V; I_C=0		1.0	mA
h_{FE}	DC Current Gain		I_C= 2A ; V_{CE}= 3V	5		