

isc Silicon NPN Power Transistors

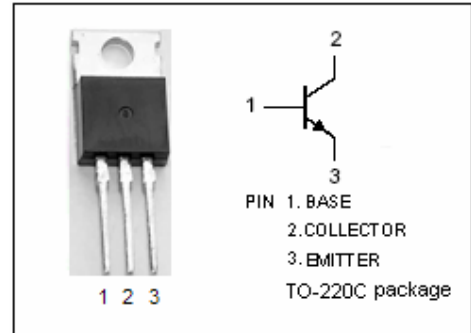
D44TD3/4/5

DESCRIPTION

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

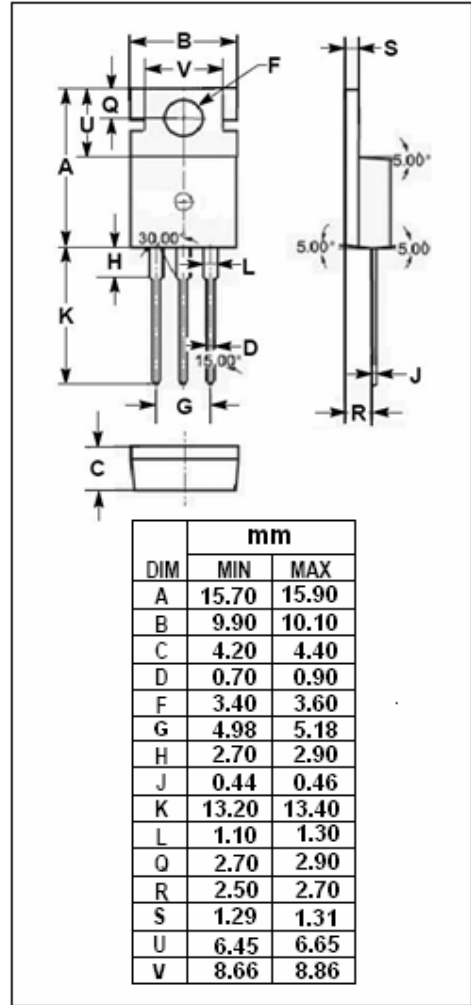
APPLICATIONS

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



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

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 @ $T_C=25^\circ\text{C}$	50	W	
$T_J$	Junction Temperature	150	$^\circ\text{C}$	
$T_{stg}$	Storage Temperature Range	-65~150	$^\circ\text{C}$	



THERMAL CHARACTERISTICS

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

## isc Silicon NPN Power Transistors

## D44TD3/4/5

## ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$  unless otherwise specified

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