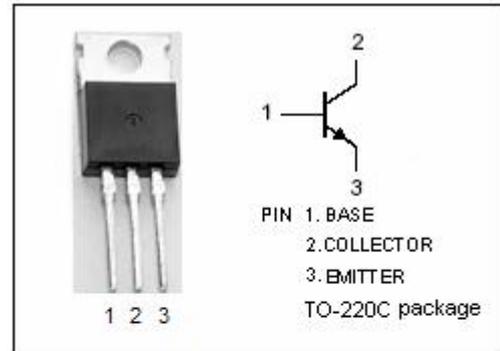


isc Silicon NPN Power Transistors
D44T3/4
DESCRIPTION

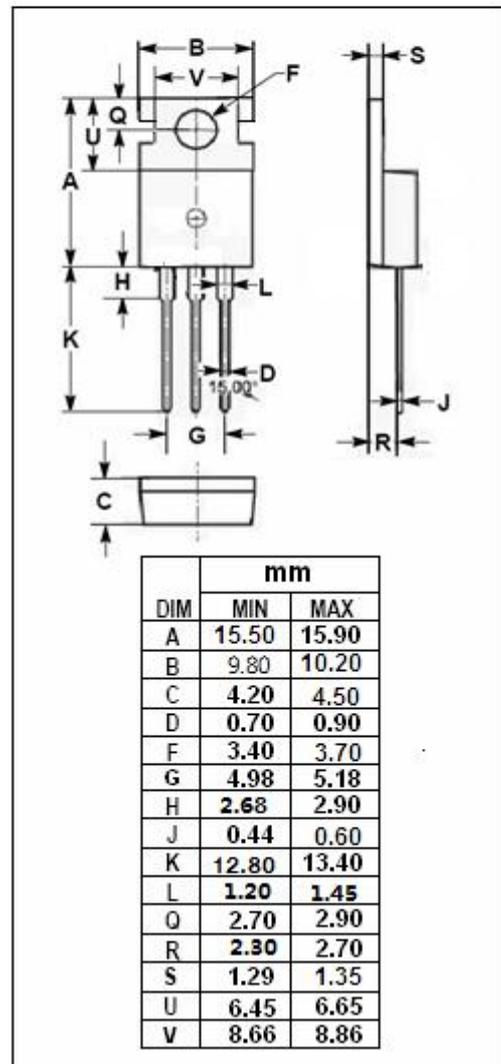
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 300V$ (Min)
- High Switching Speed
- Low Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for general purpose amplifier and switching applications.


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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage $V_{BE}=0$	400	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	2	A
I_{CM}	Collector Current-Peak	4	A
I_B	Base Current-Continuous	0.5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	31.2	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	4	$^\circ C/W$

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 0.5A; I _B = 50mA			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 0.5A; I _B = 50mA			1.2	V
I _{CES}	Collector Cutoff Current	V _{CE} = 400V; V _{BE} = 0			10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			10	μ A
h _{FE-1}	DC Current Gain	D44T3	I _C = 0.5A ; V _{CE} = 10V		90	
		D44T4				
h _{FE-2}	DC Current Gain	D44T3	I _C = 50mA ; V _{CE} = 10V		20	
		D44T4				
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A ; V _{CE} = 10V; f _{test} = 1MHz		15		MHz
t _r	Rise Time	I _C = 0.5A; I _{B1} = -I _{B2} = 50mA			0.3	μ s
t _{stg}	Storage Time				3.0	μ s
t _f	Fall Time				0.7	μ s

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