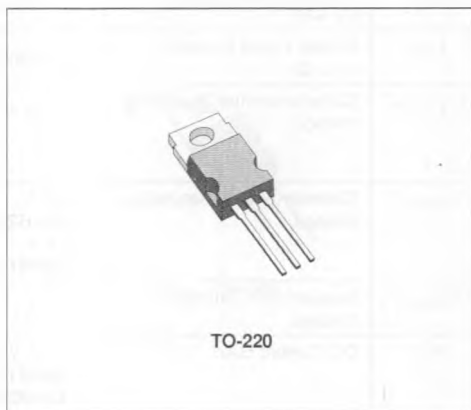


SWITCHING APPLICATIONS GENERAL PURPOSE

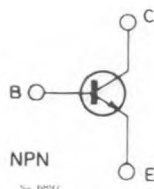
DESCRIPTION

The D44H series are silicon multiepitaxial planar transistors and are mounted in Jedec TO-220 plastic package.

They are intended for various switching and general purpose applications.



INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value				Unit
		D44H 1/2	D44H 4/5	D44H 7/8	D44H 10/11	
V_{CE0}	Collector-emitter Voltage ($I_B = 0$)	30	45	60	80	V
V_{EBO}	Emitter-base Voltage ($I_C = 0$)	5				V
I_C	Collector Current	10				A
I_{CM}	Collector Peak Current	20				A
P_{101}	Total Power Dissipation $T_{case} \leq 25^\circ\text{C}$	50				W
T_{sig}	Storage Temperature	- 55 to 150				$^\circ\text{C}$
T_j	Junction Temperature	150				$^\circ\text{C}$

THERMAL DATA

$R_{th(j-c)}$	Thermal Resistance Junction-case	Max	2.5	C/W
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ELECTRICAL CHARACTERISTICS ($T_{case} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cutoff Current ($I_E = 0$)	$V_{CB} = \text{Rated } V_{CEO}$			10	μA
I_{EBO}	Emitter Cutoff Current ($I_C = 0$)	$V_{EB} = \text{Rated } V_{EBO}$			100	μA
$V_{CEO(sus)}^*$	Collector-emitter Sustaining Voltage	$I_C = 100\text{ mA}$ for D44H1/2 for D44H4/5 for D44H7/8 for D44H10/11	30 45 60 80			V V V V
$V_{CE(sat)}^*$	Collector-emitter Saturation Voltage	$I_C = 8\text{ A}$ $I_B = 0.4\text{ A}$ for D44H2/5/8/11 $I_C = 8\text{ A}$ $I_B = 0.8\text{ A}$ for D44H1/4/7/10			1 1	V V
$V_{BE(sat)}^*$	Base-emitter Saturation Voltage	$I_C = 8\text{ A}$ $I_B = 0.8\text{ A}$			1.5	V
h_{FE}^*	DC Current Gain	$V_{CE} = 1\text{ V}$ $I_C = 2\text{ A}$ for D44H1/4/7/10 for D44H2/5/8/11 $V_{CE} = 1\text{ V}$ $I_C = 4\text{ A}$ for D44H1/4/7/10 for D44H2/5/8/11	35 60 20 40			

* Pulsed . pulse duration = 300 μs . duty cycle = 1.5%.