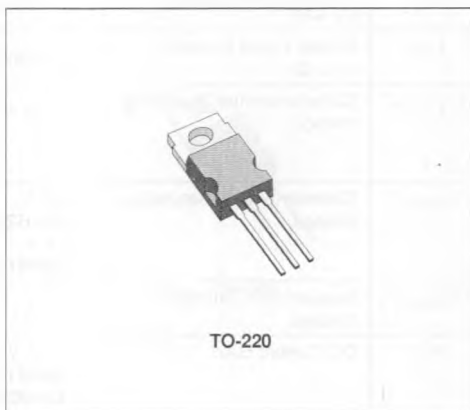


## SWITCHING APPLICATIONS GENERAL PURPOSE

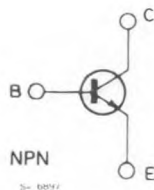
### DESCRIPTION

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	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current ( $I_C = 0$ )	$V_{EB} = \text{Rated } V_{EBO}$			100	$\mu\text{A}$
$V_{CEO(sus)}^*$	Collector-emitter Sustaining Voltage	$I_C = 100\text{ mA}$ for <b>D44H1/2</b> for <b>D44H4/5</b> for <b>D44H7/8</b> for <b>D44H10/11</b>	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 <b>D44H2/5/8/11</b> $I_C = 8\text{ A}$ $I_B = 0.8\text{ A}$ for <b>D44H1/4/7/10</b>			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 <b>D44H1/4/7/10</b> for <b>D44H2/5/8/11</b> $V_{CE} = 1\text{ V}$ $I_C = 4\text{ A}$ for <b>D44H1/4/7/10</b> for <b>D44H2/5/8/11</b>	35 60 20 40			

\* Pulsed . pulse duration = 300 $\mu\text{s}$ . duty cycle = 1.5%.