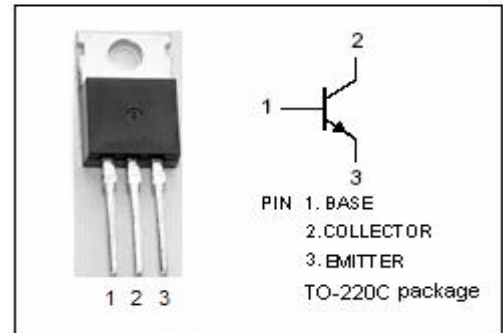


isc Silicon NPN Power Transistors
D44VH10
DESCRIPTION

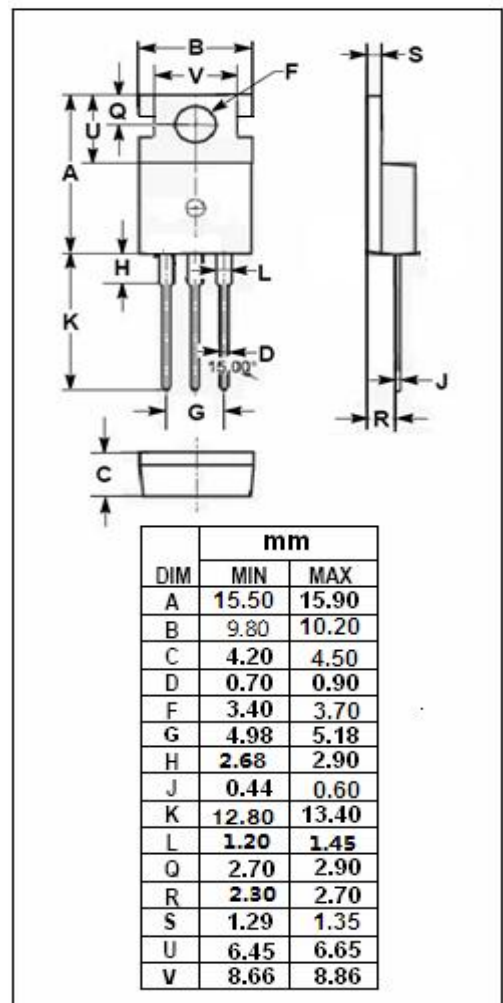
- Low Collector-Emitter Saturation Voltage
: $V_{CE(sat)} = 0.4V(\text{Max}) @ I_C = 8A$
- Fast Switching Speeds
- Complement to Type D45VH10
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for general purpose power amplification and switching such as output or driver stages in applications such as switching regulators, converters and power amplifier.


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

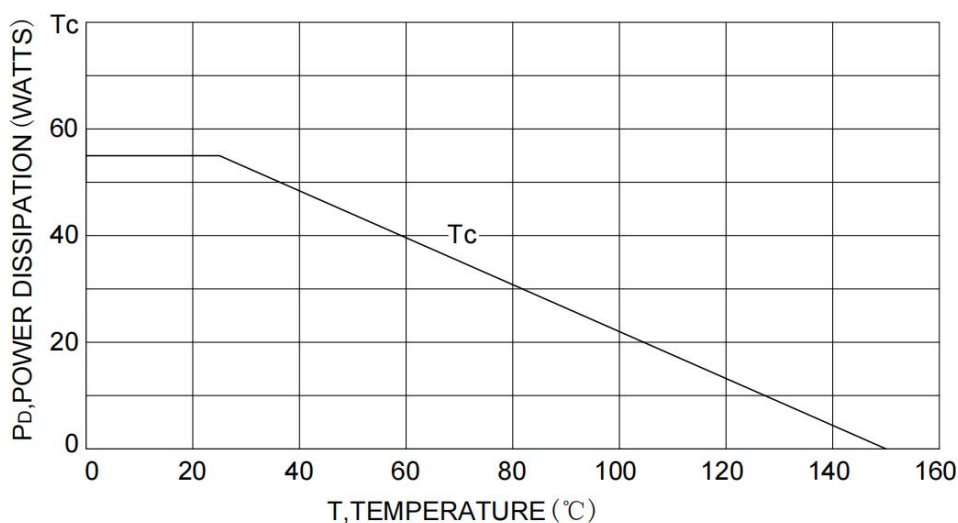
SYMBOL	PARAMETER	VALUE	UNIT
V_{CEO}	Collector-Emitter Voltage	80	V
V_{CBO}	Collector-Base Voltage	100	V
V_{EBO}	Emitter-Base Voltage	7.0	V
I_C	Collector Current-Continuous	15	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	83	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Thermal Resistance, Junction to Case	1.5	$^\circ\text{C/W}$

isc Silicon NPN Power Transistors
D44VH10
ELECTRICAL CHARACTERISTICS
 $T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_{EBO}	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}; I_C=0$	7	-	V
V_{CEO}	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}; I_B=0$	80	-	V
V_{CBO}	Collector-Base Breakdown Voltage	$I_C=1\text{mA}; I_B=0$	100	-	V
I_{EBO}	Emitter Cutoff Current	$V_{EB}=7\text{V}; I_C=0$	-	10	μA
I_{CEO}	Collector-Emitter Cutoff Current	$V_{CE}=80\text{V}; I_B=0$	-	1	mA
I_{CBO}	Collector-Emitter Cutoff Current	$V_{CE}=80\text{V}; I_E=0$	-	100	μA
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=8\text{A}; I_B=0.4\text{A}$	-	0.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=8\text{A}; I_B=0.4\text{A}$	-	1.2	V
h_{FE-1}	DC Current Gain	$I_C=2\text{A}; V_{CE}=1\text{V}$	35	-	-
h_{FE-2}	DC Current Gain	$I_C=4\text{A}; V_{CE}=1\text{V}$	20	-	-

• Power and temperature curve


isc Silicon NPN Power Transistors**D44VH10**

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