

**isc Silicon PNP Power Transistors**
**D45VH10G**
**DESCRIPTION**

- Low Collector-Emitter Saturation Voltage  
:  $V_{CE(sat)} = -1.0V(\text{Max}) @ I_C = -8A$
- Fast Switching Speeds
- Complement to Type D44VH10
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

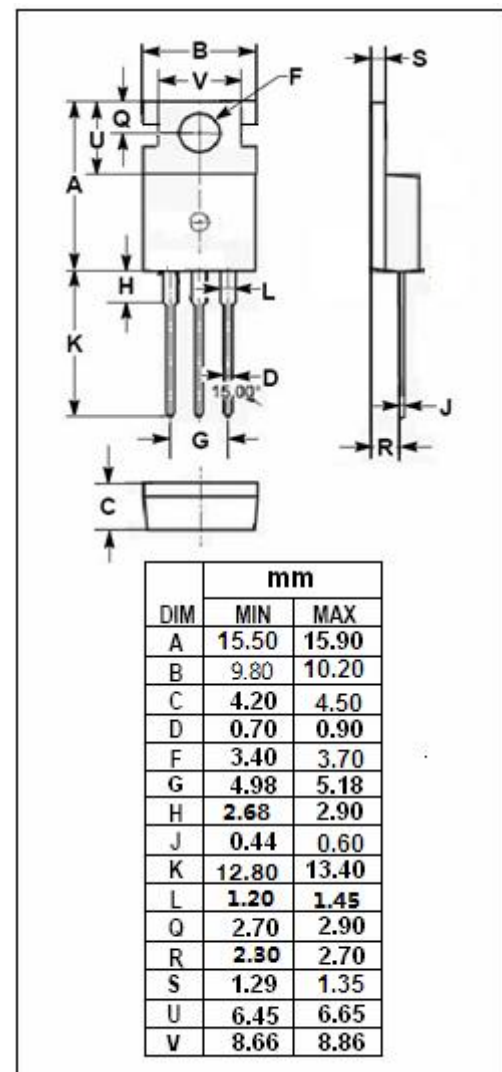
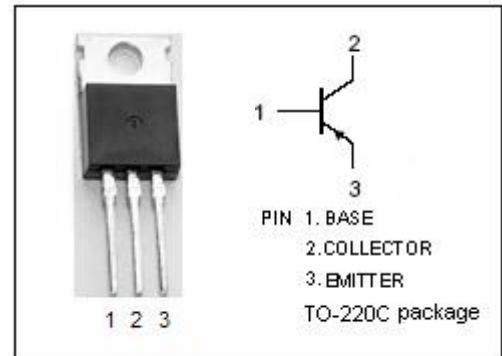
- Designed for general purpose power amplification and switching such as output or driver stages in applications such as switching regulators, converters and power amplifier.

**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**

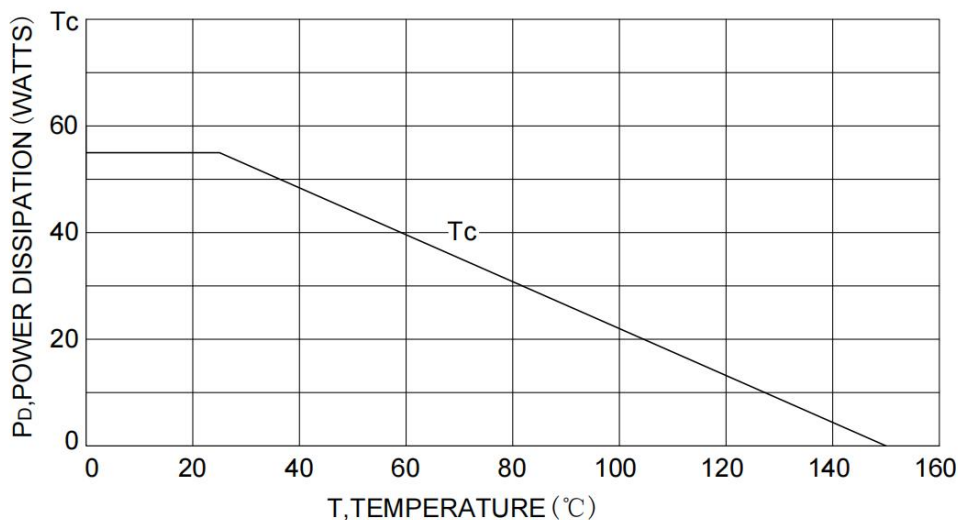
SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.5	$^\circ\text{C/W}$



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**ELECTRICAL CHARACTERISTICS**

 T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -1mA; I <sub>C</sub> = 0	-7	-	V
V <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -10mA; I <sub>B</sub> = 0	-80	-	V
V <sub>CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -1mA; I <sub>B</sub> = 0	-100	-	V
I <sub>CEO</sub>	Collector-Emitter Cutoff Current	V <sub>CE</sub> = -80V; I <sub>B</sub> = 0	-	1	mA
I <sub>CBO</sub>	Collector-Base Cutoff Current	V <sub>CE</sub> = -100V; I <sub>B</sub> = 0	-	0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -7V; I <sub>C</sub> = 0	-	-10	μ A
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -8A ; I <sub>B</sub> = -0.8 A	-	-1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -8A; I <sub>B</sub> = -0.8 A	-	-1.2	V
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -2A; V <sub>CE</sub> = -1V	35	-	-
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -4A ; V <sub>CE</sub> = -1V	20	-	-

**• Power and temperature curve**


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