

**isc Silicon PNP Power Transistor**

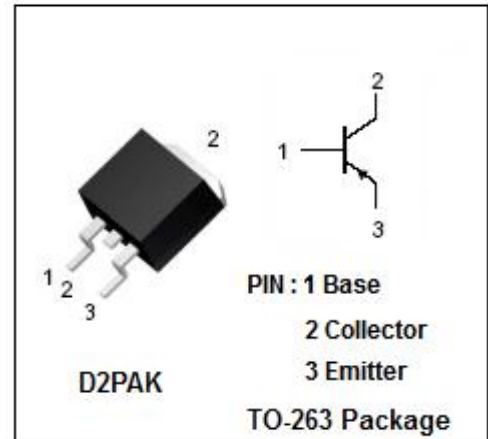
**MJB45H11**

**DESCRIPTION**

- Low Collector-Emitter saturation voltage
- Pb-free package are available
- Fast switching speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

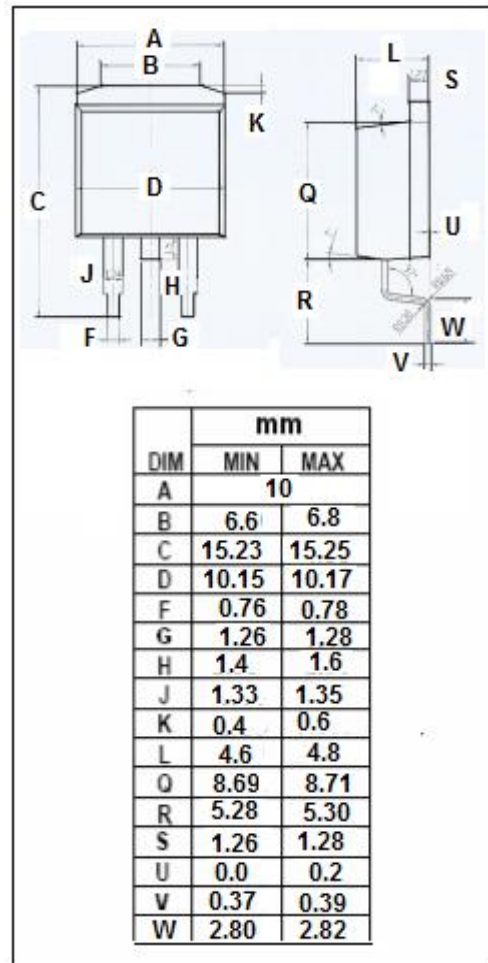
**APPLICATIONS**

- General purpose amplification and switching such as out or driver stages in applications such as switching regulators, converters and power amplifiers



**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CEO</sub>	Collector-Emitter Voltage	-80	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current-Continuous	-10	A
I <sub>CP</sub>	Collector Current-Pulse	-20	A
P <sub>C</sub>	Total Power Dissipation @ T <sub>a</sub> =25°C	2	W
P <sub>C</sub>	Total Power Dissipation @ T <sub>c</sub> =25°C	50	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



**isc Silicon PNP Power Transistor****MJB45H11****ELECTRICAL CHARACTERISTICS**T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> =-30mA; I <sub>B</sub> =0	-80			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> =-8A; I <sub>B</sub> =-400mA			-1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> =-8A; I <sub>B</sub> =-800mA			-1.5	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> =-80V; I <sub>E</sub> =0			-10	uA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-50	uA
h <sub>FE1</sub>	DC Current Gain	I <sub>C</sub> =-2A; V <sub>CE</sub> =-1V	60			
h <sub>FE2</sub>	DC Current Gain	I <sub>C</sub> =-4A; V <sub>CE</sub> =-1V	40			
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-10V		40		MHz
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =-10V; f=1.0MHz		230		pF

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