

isc Silicon PNP Power Transistors

MJF45H11

DESCRIPTION

- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -1.0V(\text{Max.}) @ I_C = -8A$
- Fast Switching Speeds
- Complement to Type MJF44H11
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

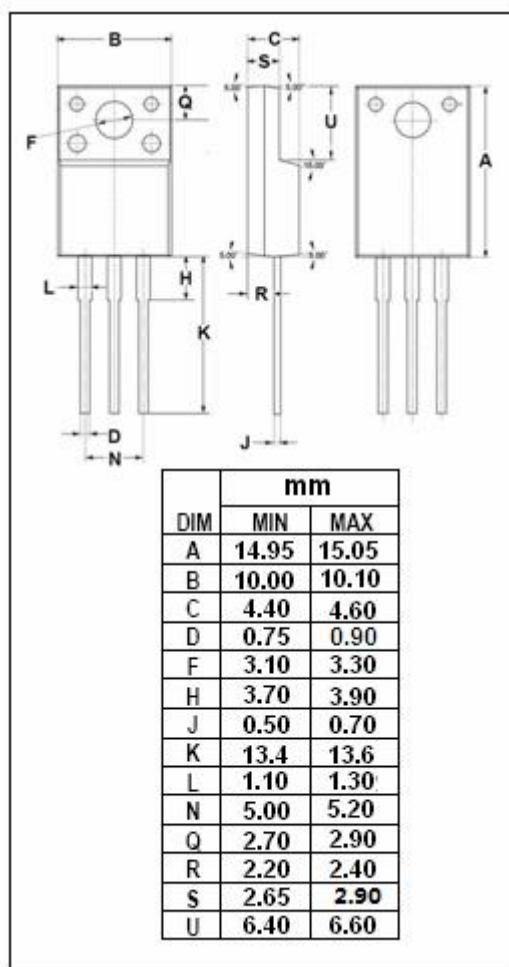
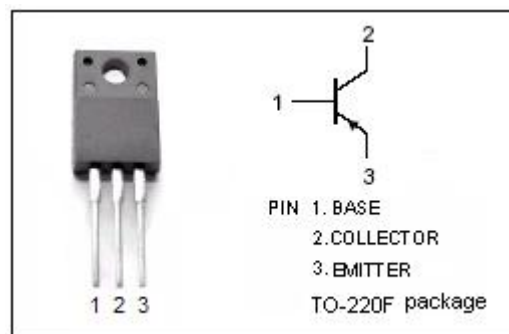
- Designed for general purpose power amplification and switching such as output or driver stages in applications such as switching regulators, converters and power amplifier.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-10	A
I_{CM}	Collector Current-Peak	-20	A
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	36	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	2	
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	3.5	$^\circ\text{C}/\text{W}$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	62.5	$^\circ\text{C}/\text{W}$



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = -30mA; I _B = 0	-80			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -8A; I _B = -0.4 A			-1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -8A; I _B = -0.8 A			-1.5	V
I _{CES}	Collector Cutoff Current	V _{CE} =Rated V _{CEO} ;			-1.0	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-10	μ A
h _{FE-1}	DC Current Gain	I _C = -2A; V _{CE} = -1V	60			
h _{FE-2}	DC Current Gain	I _C = -4A; V _{CE} = -1V	40			

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