

isc Silicon PNP Power Transistor

MJB42C

DESCRIPTION

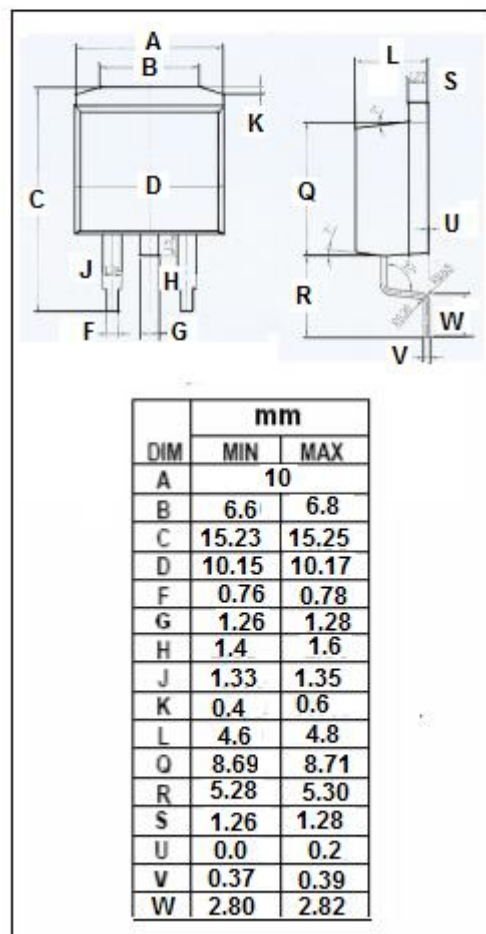
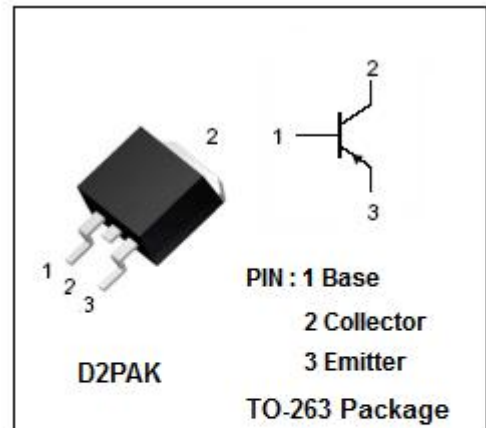
- Lead formed for surface mount applications(NO suffix)
- Electrically the same as TIP42 series
- Pb-free package are available
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- General purpose amplifier and switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-6	A
I_{CP}	Collector Current-Pulse	-10	A
I_B	Base Current	-2	A
P_C	Total Power Dissipation @ $T_a=25^\circ\text{C}$	2	W
P_C	Total Power Dissipation @ $T_c=25^\circ\text{C}$	65	W
T_J	Junction Temperature	-65~150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**MJB42C****ELECTRICAL CHARACTERISTICS**T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{(BR)CEO} *	Collector-Emitter Breakdown Voltage	I _C =-30mA; I _B =0	-100			V
V _{CE(sat)} *	Collector-Emitter Saturation Voltage	I _C =-6A; I _B =-600mA			-1.5	V
V _{BE(on)} *	Base-Emitter On Voltage	I _C =-6A; V _{CE} =-4V			-2.0	V
I _{CEO}	Collector Cutoff Current	V _{CE} =-60V; I _E =0			-0.7	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} =-5V; I _C =0			-50	uA
h _{FE1} *	DC Current Gain	I _C =-0.3A; V _{CE} =-4V	30			
h _{FE2} *	DC Current Gain	I _C =-3A; V _{CE} =-4V	15		75	
f _T	Current-Gain—Bandwidth Product	I _C =-0.5A; V _{CE} =-10V		3		MHz

*:Pulse test PW≤300us,duty cycles≤2%

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