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SEMICONDUCTOR



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MJD42C(MS)


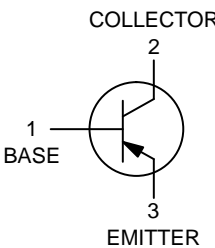

Product specification

TRANSISTOR (PNP)

FEATURES

- Designed for General Purpose Amplifier and Low Speed Switching Applications.
- Lead Formed for Surface Mount Applications in Plastic Sleeves
- Electrically Similar to Popular TIP41 and TIP42 Series
- Monolithic Construction With Built-in Base-Emitter Resistors

Reference News

PACKAGE OUTLINE	Pin Configuration	Marking
 <p>1.BASE 2.COLLECTOR 3.EMITTER</p>		

Notes :XXX represents the order code.

MAXIMUM RATINGS (Ta=25 °C unless otherwise noted)

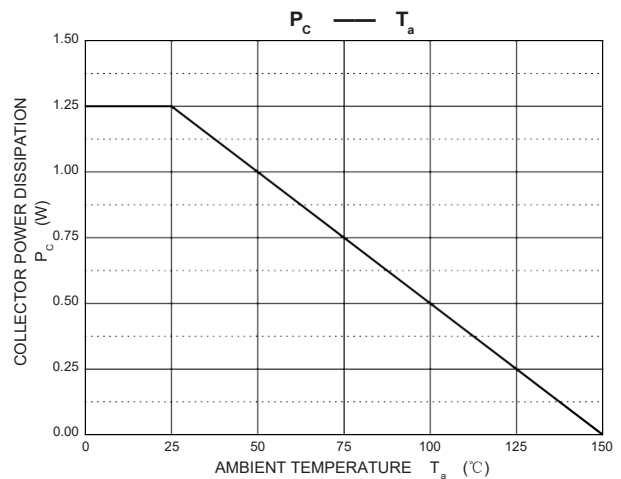
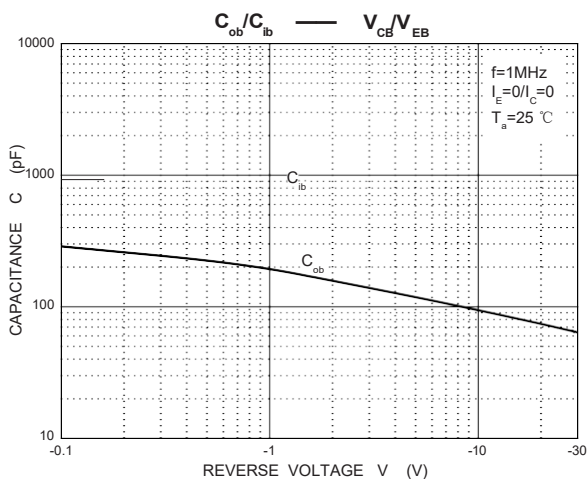
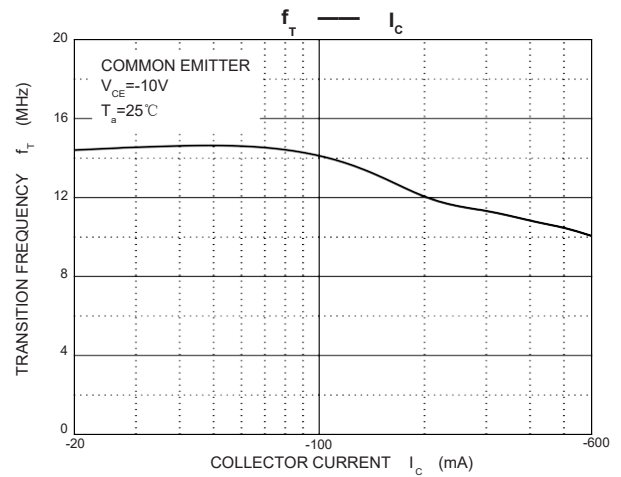
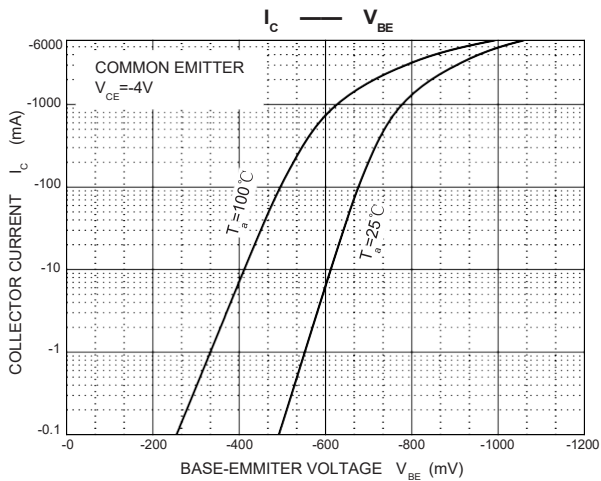
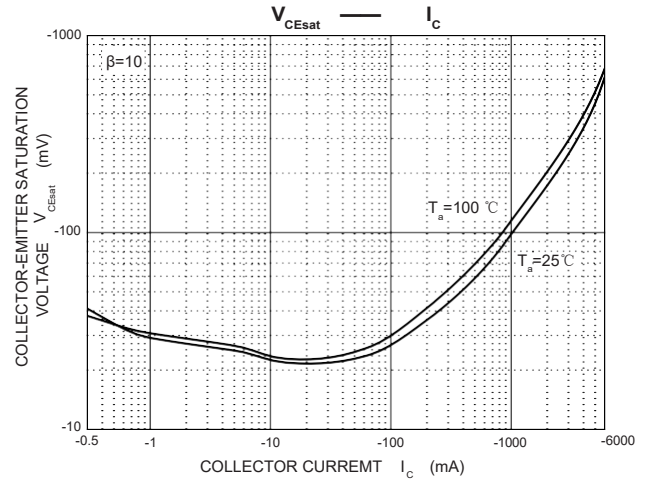
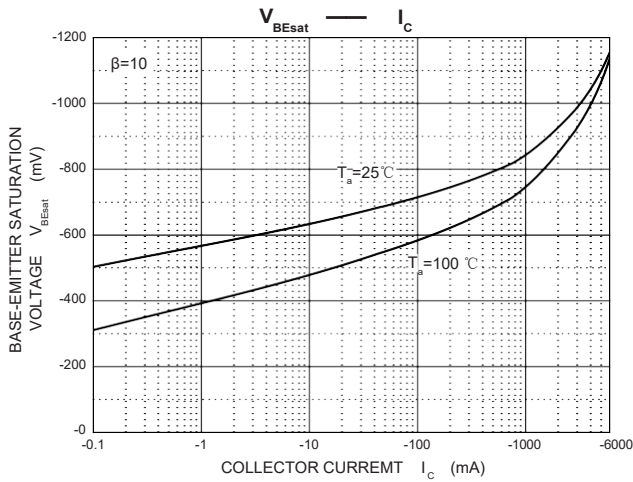
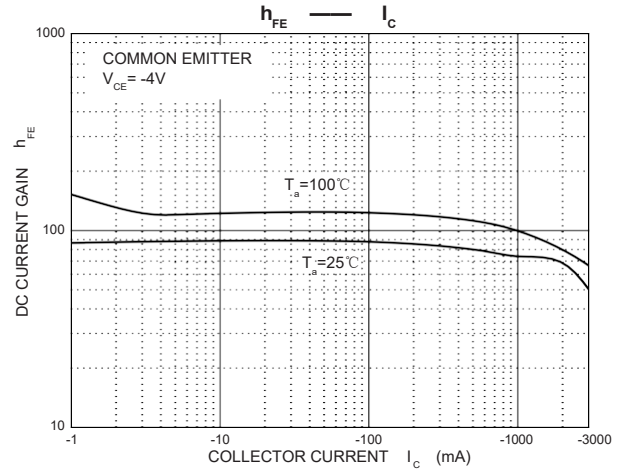
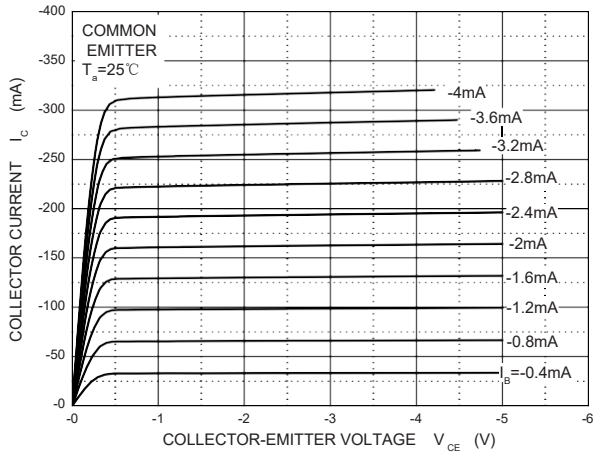
Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-100	V
V _{CEO}	Collector-Emitter Voltage	-100	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-6	A
I _{CP} *	Collector Current -Pulse	-10	A
P _C	Collector Power Dissipation	1.25	W
T _J , T _{stg}	Operating Junction and Storage Temperature Range	-55-150	°C

ELECTRICAL CHARACTERISTICS (T_a=25 °C unless otherwise specified)

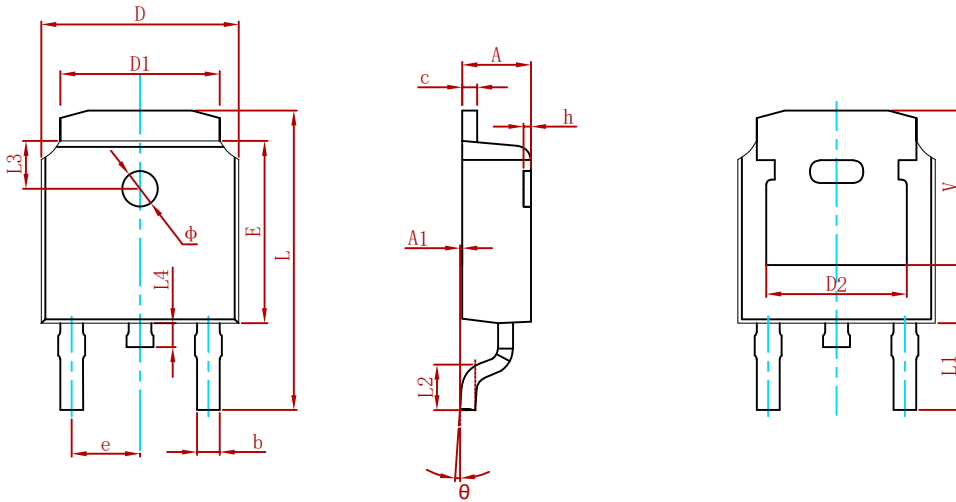
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA, I _E =0	-100			V
Collector-emitter breakdown voltage	V _{CEO(sus)}	I _C =-30mA, I _B =0	-100			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100μA, I _C =0	-5			V
Collector cut-off current	I _{CEO}	V _{CB} =-60V, I _E =0			-50	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0			-0.5	mA
DC current gain	h _{FE(1)}	V _{CE} =-4V, I _C =-0.3A	30			
	h _{FE(2)}	V _{CE} =-4V, I _C =-3A	15		75	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-6A, I _B =-0.6A			-1.5	V
Base-emitter voltage	V _{BE}	V _{CE} =-4V, I _C =-6A			-2	V
Transition frequency	f _T	V _{CE} =-10V, I _C =-500mA, f=1MHz	3			MHz

* Pulse Test: PW≤300μs, Duty Cycle≤2%

Static Characteristic

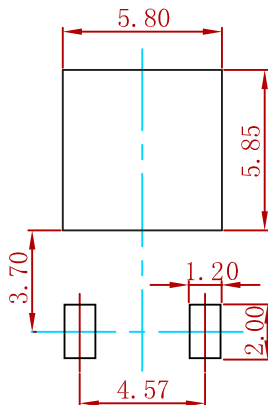


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.635	0.770	0.025	0.030
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.712	10.312	0.382	0.406
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	1.600 REF.		0.063 REF.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.250 REF.		0.207 REF.	

Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05mm.
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
MJD42C(MS)	TO-252	2500

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