# MSKSEMI 美森科













ESD

TVS

TSS

MOV

GDT

PLED

MJD42CT4G(MS)

# Product specification



### MSKSEMI SEMICONDUCTOR

# **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
- IMonolithic Construction With Built–in Base–Emitter Resistors

# **Reference News**

PACKAGE OUTLINE	COMPLEMENTARY	Marking
1.BASE 2.COLLECTOR 3.EMITTER	COLLECTOR 2 1 BASE 3 EMITTER	MSKSEMI MJD42CT4G MS XXX

Notes :XXX represents the order code.

# MAXIMUM RATINGS (Ta=25 ℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
Vсво	Collector-Base Voltage	-100	V
Vceo	Collector-EmitterVoltage	-100	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
lc	Collector Current -Continuous	-6	А
	Collector Current -Pluse	-10	A
Pc	Collector Power Dissipation	1.25	W
TJ,Tstg	Operating Junction and Storage Temperature Range	-55-150	ĉ



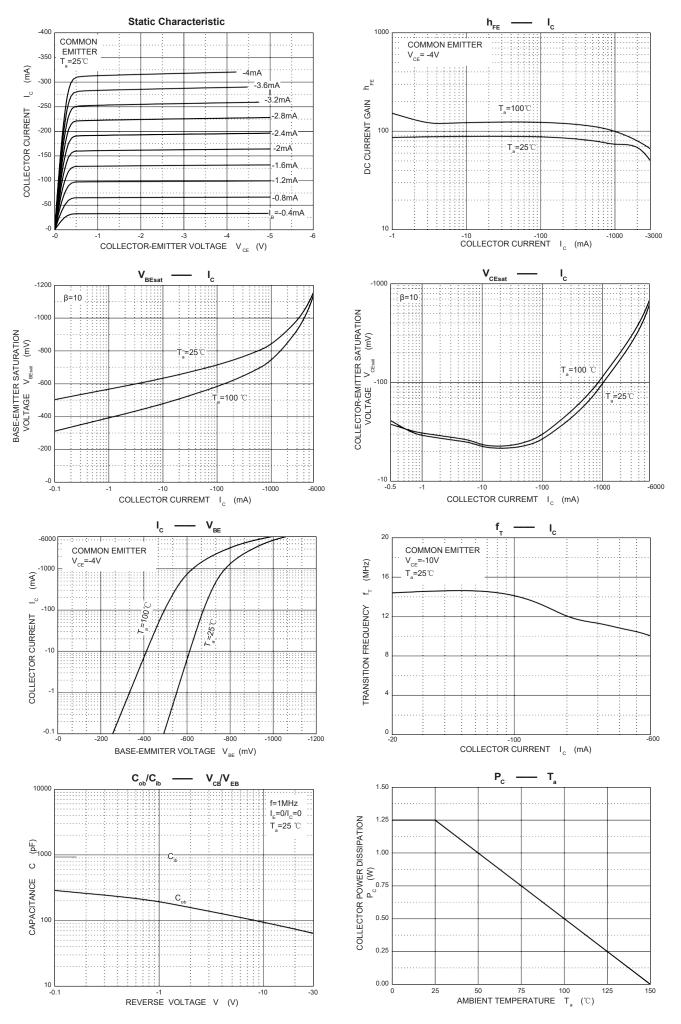
# ELECTRICAL CHARACTERISTICS (Ta=25 $^{\circ}$ C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	l <sub>C</sub> =-100μΑ,I <sub>E</sub> =0	-100			V
Collector-emitter breakdown voltage	V <sub>CEO(sus)</sub>	I <sub>C</sub> =-30mA,I <sub>B</sub> =0	-100			V
Emitter-base breakdown voltage	V(BR)EBO	l <sub>E</sub> =-100μΑ,I <sub>C</sub> =0	-5			V
Collector cut-off current	ICEO	V <sub>CB</sub> =-60V,I <sub>E</sub> =0			-50	μA
Emitter cut-off current	Іево	V <sub>EB</sub> =-5V I <sub>C</sub> =0			-0.5	mA
DC ourrent goin	h <sub>FE(1)</sub>	V <sub>CE</sub> =-4V I <sub>C</sub> =-0.3A	30			
DC current gain	hFE(2)	V <sub>CE</sub> =-4V,I <sub>C</sub> =-3A	15		75	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-6A,I <sub>B</sub> =-0.6A			-1.5	V
Base-emitter voltage	VBE	V <sub>CE</sub> =-4V,I <sub>C</sub> =-6A			-2	V
Transition frequency	f⊤	V <sub>CE</sub> =-10V,I <sub>C</sub> =-500mA,f=1MHz	3			MHz

\* Pulse Test: PW≤300µs, Duty Cycle≤2%



# MJD42CT4G(MS)



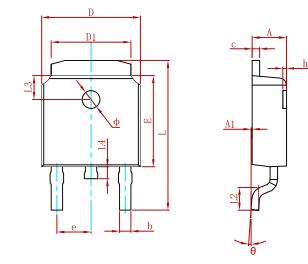
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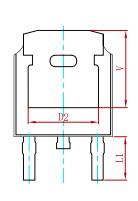
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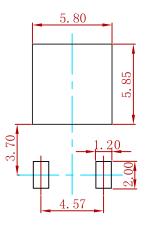
#### PACKAGE MECHANICAL DATA





Symbol	Dimensions	In Millimeters	Dimensions In Inches		
Symbol	Min.	Max.	Min.	Max.	
Α	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	
С	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	
е	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
MJD42CT4G(MS)	TO-252	2500



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