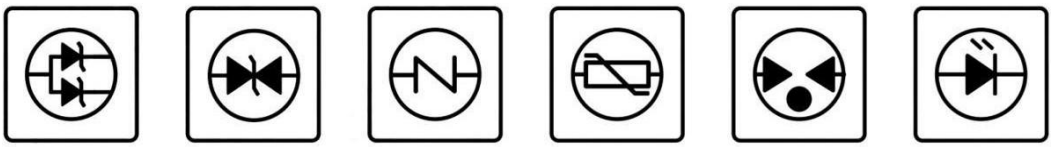
MSKSEMI 美森科
SEMICONDUCTOR



MJD42C(MS)

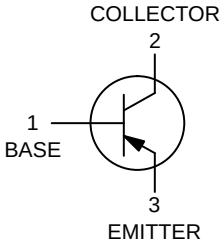
Product specification

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
- IMonolithic Construction With Built–in Base–Emitter Resistors

Reference News

PACKAGE OUTLINE	Pin Configuration	Marking
 1.BASE 2.COLLECTOR 3.EMITTER		MSKSEMI MJD42C MS XXX

Notes :XXX represents the order code.

MAXIMUM RATINGS (Ta=25℃ unless otherwise noted)

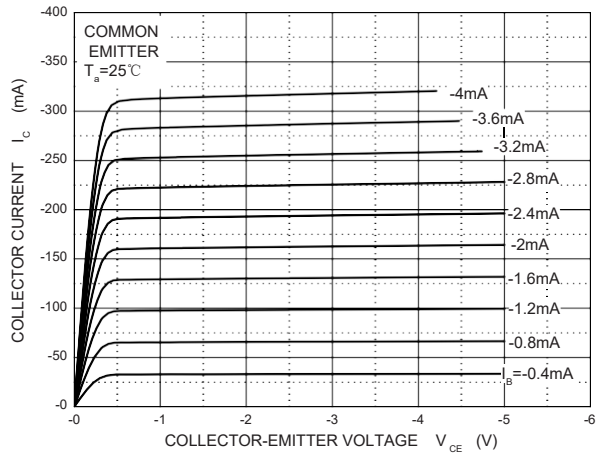
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-EmitterVoltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-6	A
I_{CP}^*	Collector Current -Pluse	-10	A
P_C	Collector Power Dissipation	1.25	W
T_J,T_{stg}	Operating Junction and Storage Temperature Range	-55-150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

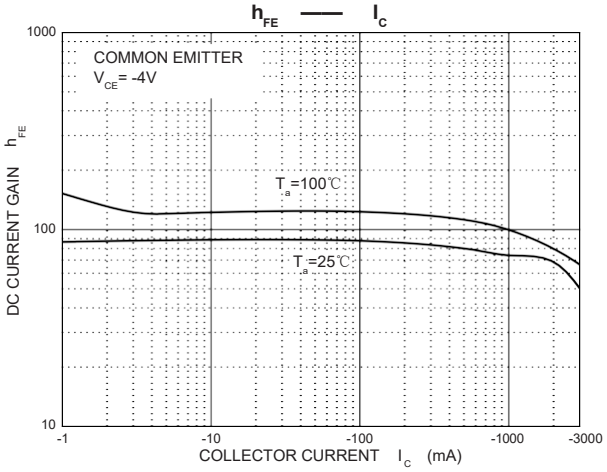
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,I_E=0	-100			V
Collector-emitter breakdown voltage	$V_{CEO(sus)}$	I_C=-30mA,I_B=0	-100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-5			V
Collector cut-off current	I_{CEO}	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%

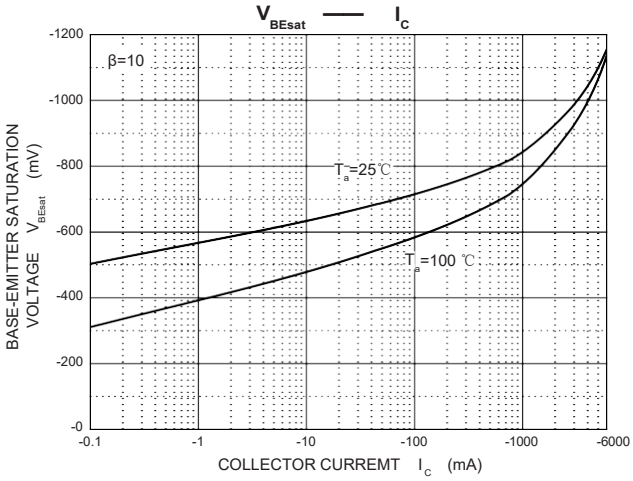
Static Characteristic



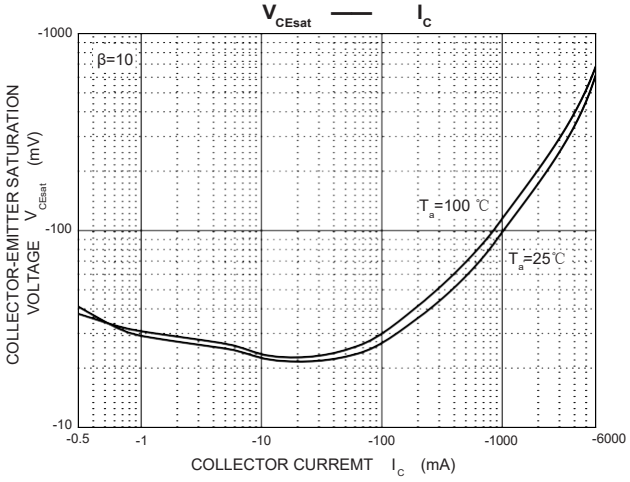
h_{FE} — I_C



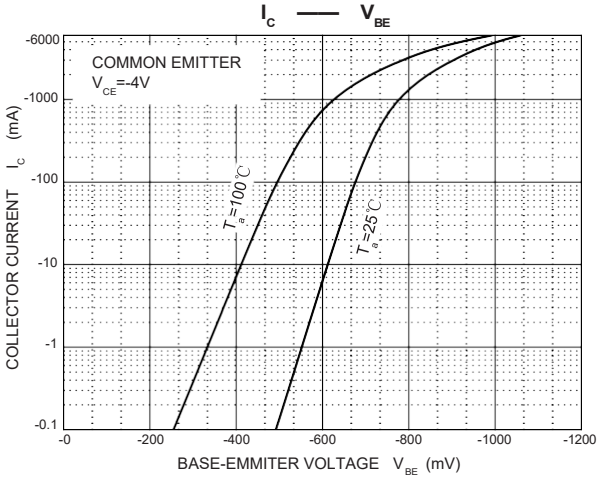
V_{BEsat} — I_C



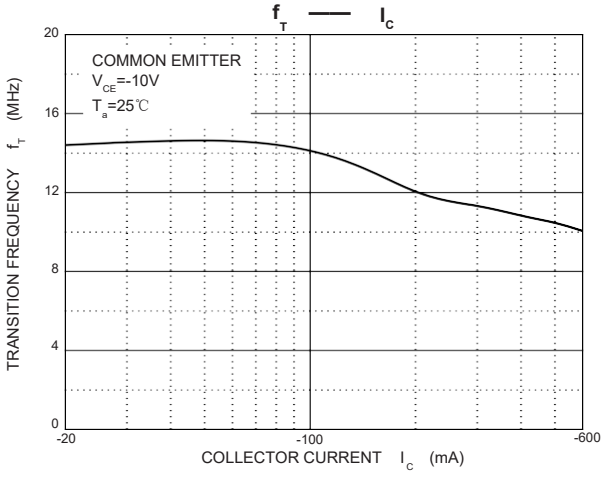
V_{CEsat} — I_C



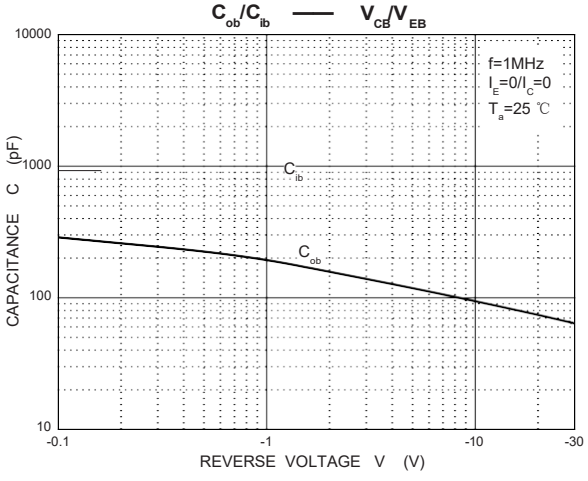
I_C — V_{BE}



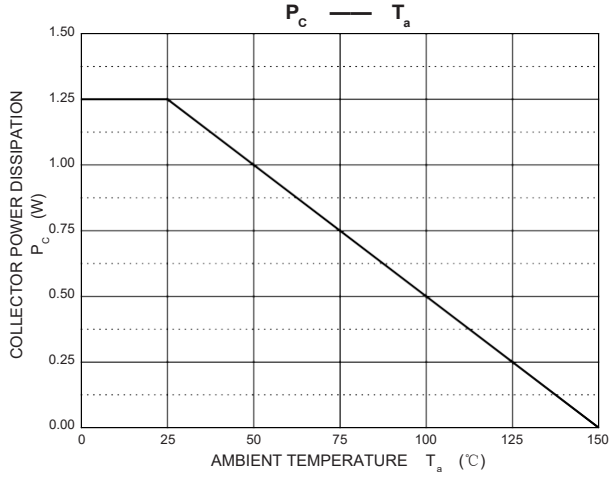
f_T — I_C



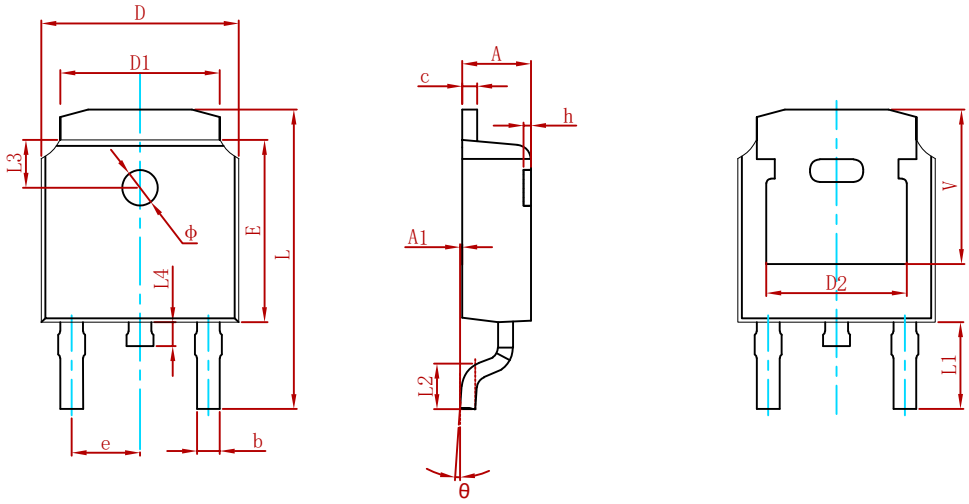
C_{ob}/C_{ib} — V_{CB}/V_{EB}



P_C — T_a

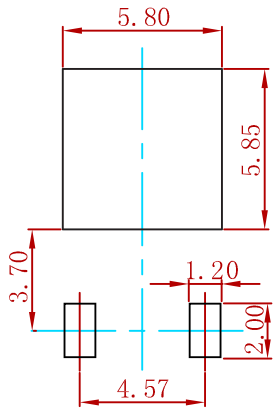


PACKAGE MECHANICAL DATA



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

Attention

■ Any and all MSKSEMI Semiconductor products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your MSKSEMI Semiconductor representative nearest you before using any MSKSEMI Semiconductor products described or contained herein in such applications.

■ MSKSEMI Semiconductor assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specificationsof any andall MSKSEMI Semiconductor products described orcontained herein.

■ Specifications of any and all MSKSEMI Semiconductor products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer'sproducts orequipment.

■ MSKSEMI Semiconductor. strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with someprobability. It is possiblethat these probabilistic failures could give rise to accidents or events that could endanger human lives, that could give rise to smoke or fire, or that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents or events cannot occur. Such measures include but are not limited to protective circuits anderror prevention circuitsfor safedesign, redundant design, and structural design.

■ In the event that any or all MSKSEMI Semiconductor products(including technical data, services) described or contained herein are controlled under any of applicable local export control laws and regulations, such products must not be exported without obtaining the export license from theauthorities concerned in accordance with the above law.

■ No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of MSKSEMI Semiconductor.

■ Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. MSKSEMI Semiconductor believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringementsof intellectual property rights or other rightsof third parties.

■ Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. Whendesigning equipment, referto the "Delivery Specification" for the MSKSEMI Semiconductor productthat you intend to use.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Bipolar Transistors - BJT ***category:***

Click to view products by MSKSEMI ***manufacturer:***

Other Similar products are found below :

BC559C MCH4017-TL-H MMBT-2369-TR BC546/116 NJVMJD148T4G NTE16 NTE195A IMX9T110 2N4401-A 2N6728 2SA1419T-TD-H 2SB1204S-TL-E 2SC5488A-TL-H FMC5AT148 2N2369ADCSM 2N2907A 2N3904-NS 2N5769 2SC4618TLN CPH6501-TL-E US6T6TR BAX18/A52R BC556/112 IMZ2AT108 MMST8098T146 MCH6102-TL-E BC846B-13-F 2N3879 30A02MH-TL-E NTE13 NTE282 NTE323 NTE350 NTE81 JANTX2N2920L JANSR2N2907AUB CMLT3946EG TR SNSS40600CF8T1G CMLT3906EG TR GRP-DATA-JANS2N2907AUB GRP-DATA-JANS2N2222AUA MMDT3946FL3-7 2N4240 JANS2N3019 MSB30KH-13 2N2221AUB 2SD1815T-TL-E 2N6678 2N2907Ae4 JAN2N3507