



Micro Commercial Components



Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

MMDT3906

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Ideal for Low Power Amplification and Switching
- Ultra-small Surface Mount Package
- Epitaxial Planar Die Construction
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: K3N

Maximum Ratings @ 25°C Unless Otherwise Specified

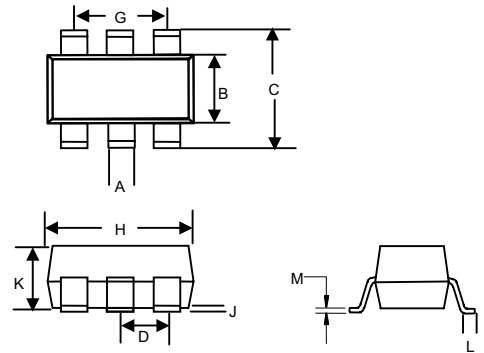
Symbol	Rating	Rating(PNP)	Unit
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{CBO}	Collector-Base Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-0.2	A
P_C	Collector Dissipation	0.2	W
T_J	Operating Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

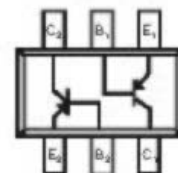
Symbol	Parameter		Min	Max	Units
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage (I _C =-1mAdc, I _B =0)		-40	---	Vdc
V _{(BR)CBO}	Collector-Base Breakdown Voltage (I _C =-10uAdc, I _E =0)		-40	---	Vdc
V _{(BR)EBO}	Collector-Emitter Breakdown Voltage (I _E =-10uAdc, I _C =0)		-5	---	Vdc
I _{CBO}	Collector Cutoff Current (V _{CB} =-30Vdc, I _E =0)		---	-50	nAdc
I _{EBO}	Emitter Cutoff Current (V _{EB} =-5Vdc, I _C =0)		---	-50	nAdc
h _{FE}	DC Current Gain (I _C =-0.1mAdc, V _{CE} =-1Vdc)		40	---	---
	(I _C =-1mAdc, V _{CE} =-1Vdc)		70	---	
	(I _C =-10mAdc, V _{CE} =-1Vdc)		100	300	
	(I _C =-50mAdc, V _{CE} =-1Vdc)		60	---	
	(I _C =-100mAdc, V _{CE} =-1Vdc)		30	---	
V _{CE(sat)}	Collector-Emitter Saturation Voltage (I _C =-10mAdc, I _B =-1mAdc)		---	-0.25	Vdc
	(I _C =-50mAdc, I _B =-5mAdc)		---	-0.4	
V _{BE(sat)}	Base-Emitter Saturation Voltage (I _C =-10mAdc, I _B =-1mAdc)		-0.65	-0.85	Vdc
	(I _C =-50mAdc, I _B =-5mAdc)		---	-0.95	
f _T	Current Gain-Bandwidth Product (V _{CE} =-20Vdc, I _C =-10mAdc, f=100MHz)		250	---	MHz
C _{ob}	Output Capacitance (V _{CB} =-5Vdc, f=1.0MHz, I _E =0)		---	4.5	pF
NF	Noise Figure (V _{CE} =-5V, I _C =-0.1mA, f=1KHz, R _S =1k Ω)		---	4	dB
t _d	Delay Time	V _{CC} =-3V, I _C =-10mA, V _{BE} =-0.5V, I _{B1} =-I _{B2} =-1mA	---	35	ns
t _r	Rise Time		---	35	ns
t _s	Storage Time	V _{CC} =-3V, I _C =-10mA, I _{B1} =-I _{B2} =-1mA	---	225	ns
t _f	Fall Time		---	75	ns

PNP Small Signal Surface Mount Transistors

SOT-363



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.006	.014	0.15	0.35	
B	.045	.053	1.15	1.35	
C	.085	.096	2.15	2.45	
D	.026		0.65Nominal		
G	.047	.055	1.20	1.40	
H	.071	.087	1.80	2.20	
J	---	.004	---	0.10	
K	.035	.043	0.90	1.10	
L	.010	.018	0.26	0.46	
M	.003	.006	0.08	0.15	



Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 3Kpcs/Reel

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.