



Micro Commercial Components

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

MMDT3906

Features

- Ideal for Low Power Amplification and Switching
- Ultra-small Surface Mount Package
- Epitaxial Planar Die Construction
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking: K3N

Maximum Ratings @ 25°C Unless Otherwise Specified

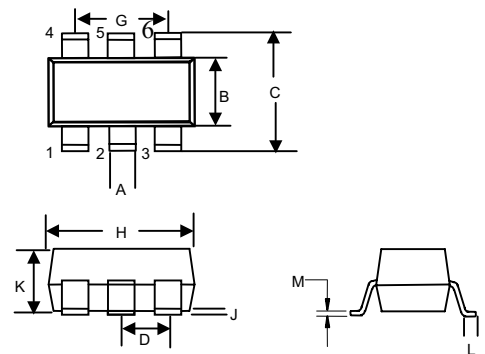
Symbol	Rating	Rating(PNP)	Unit
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{CBO}	Collector-Base Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-0.2	A
P_C	Collector Dissipation	0.2	W
T_J	Operating Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150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

Electrical Characteristics @ 25°C Unless Otherwise Specified

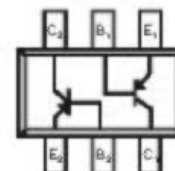
Symbol	Parameter	Min	Max	Units
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=-1mA$, $I_B=0$)	-40	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=-10\mu A$, $I_E=0$)	-40	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage ($I_E=-10\mu A$, $I_C=0$)	-5	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=-30V$, $I_E=0$)	---	-50	nAdc
I_{EBO}	Emitter Cutoff Current ($V_{EB}=-5V$, $I_C=0$)	---	-50	nAdc
h_{FE}	DC Current Gain ($I_C=-0.1mA$, $V_{CE}=-1V$) ($I_C=-1mA$, $V_{CE}=-1V$) ($I_C=-10mA$, $V_{CE}=-1V$) ($I_C=-50mA$, $V_{CE}=-1V$) ($I_C=-100mA$, $V_{CE}=-1V$)	40 70 100 60 30	--- --- 300 --- ---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=-10mA$, $I_B=-1mA$) ($I_C=-50mA$, $I_B=-5mA$)	---	-0.25 -0.4	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=-10mA$, $I_B=-1mA$) ($I_C=-50mA$, $I_B=-5mA$)	-0.65 ---	-0.85 -0.95	Vdc
f_T	Current Gain-Bandwidth Product ($V_{CE}=-20V$, $I_C=-10mA$, $f=100MHz$)	250	---	MHz
C_{ob}	Output Capacitance ($V_{CB}=-5V$, $f=1.0MHz$, $I_E=0$)	---	4.5	pF
NF	Noise Figure ($V_{CE}=-5V$, $I_C=-0.1mA$, $f=1KHz$, $R_S=1k\Omega$)	---	4	dB
t_d	Delay Time $V_{CC}=-3V$, $I_C=-10mA$,	---	35	ns
t_r	Rise Time $V_{BE}=-0.5V$, $I_{B1}=-I_{B2}=-1mA$	---	35	ns
t_s	Storage Time $V_{CC}=-3V$, $I_C=-10mA$,	---	225	ns
t_f	Fall Time $I_{B1}=-I_{B2}=-1mA$	---	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.

APPLICATIONS DISCLAIMER

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.