



Micro Commercial Components



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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

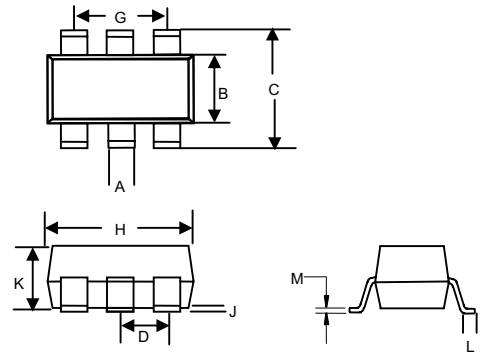
Symbol	Rating	Rating(PNP)	Unit
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{CBO}	Collector-Base Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-0.2	A
P_C	Collector Dissipation	0.2	W
T_J	Operating Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150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

Electrical Characteristics @ 25°C Unless Otherwise Specified

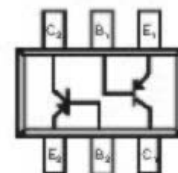
Symbol	Parameter		Min	Max	Units
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage (I _C =-1mAdc, I _B =0)		-40	---	Vdc
V _{(BR)CBO}	Collector-Base Breakdown Voltage (I _C =-10uAdc, I _E =0)		-40	---	Vdc
V _{(BR)EBO}	Collector-Emitter Breakdown Voltage (I _E =-10uAdc, I _C =0)		-5	---	Vdc
I _{CBO}	Collector 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

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