



Micro Commercial Components



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MMDT3906

PNP Small Signal Surface Mount Transistors

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

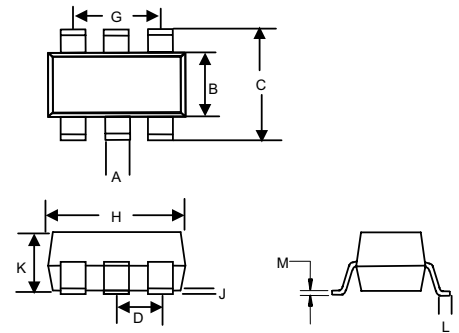
Maximum Ratings @ 25°C Unless Otherwise Specified

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

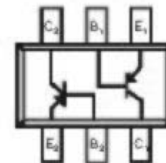
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units	
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage (I _C =-1mA, I _B =0)	-40	---	Vdc	
V _{(BR)CBO}	Collector-Base Breakdown Voltage (I _C =-10mA, I _E =0)	-40	---	Vdc	
V _{(BR)EBO}	Collector-Emitter Breakdown Voltage (I _E =-10mA, 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 =-0.1mA, V _{CE} =-1Vdc)	40	---	---	
	(I _C =-1mA, V _{CE} =-1Vdc)	70	---		
	(I _C =-10mA, V _{CE} =-1Vdc)	100	300		
	(I _C =-50mA, V _{CE} =-1Vdc)	60	---		
V _{CE(sat)}	Collector-Emitter Saturation Voltage (I _C =-10mA, I _B =-1mA)	---	-0.25	Vdc	
	(I _C =-50mA, I _B =-5mA)	---	-0.4		
V _{BE(sat)}	Base-Emitter Saturation Voltage (I _C =-10mA, I _B =-1mA)	-0.65	-0.85	Vdc	
	(I _C =-50mA, I _B =-5mA)	---	-0.95		
f _T	Current Gain-Bandwidth Product (V _{CE} =-20Vdc, I _C =-10mA, 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 =1kΩ)	---	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

SOT-363



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	





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Ordering Information :

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

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