



Micro Commercial Components



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MMDT5551

Plastic-Encapsulate Transistors

Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Capable of 200mWatts of Power Dissipation
- Ideal for Medium Power Amplification and Switching
- Operating and Storage Junction Temperatures: -55°C to 150°C
- Marking: K4N

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=1\text{mA}$, $I_B=0$)	160		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu\text{A}$, $I_E=0$)	180		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=10\mu\text{A}$, $I_C=0$)	6.0		Vdc
I_{EBO}	Emitter Cutoff Current ($V_{EB}=4\text{Vdc}$, $I_C=0$)		50	nAdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=120\text{Vdc}$, $I_E=0$)		50	nAdc
I_C	Collector Current-Continuous		200	mA
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient		625	K/W

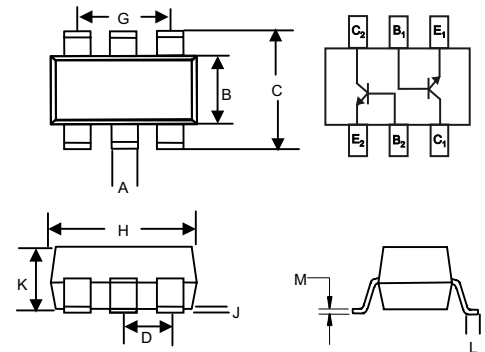
ON CHARACTERISTICS

h_{FE}	DC Current Gain* ($I_C=1\text{mA}$, $V_{CE}=5.0\text{Vdc}$) ($I_C=10\text{mA}$, $V_{CE}=5.0\text{Vdc}$)	80 100	300	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=10\text{mA}$, $I_B=1.0\text{mA}$)		0.15	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=10\text{mA}$, $I_B=1.0\text{mA}$)		1.0	Vdc

SMALL-SIGNAL CHARACTERISTICS

f_T	Current Gain-Bandwidth Product ($I_C=10\text{mA}$, $V_{CE}=20\text{Vdc}$, $f=100\text{MHz}$)	100	300	MHz
C_{obo}	Output Capacitance ($V_{CB}=5.0\text{Vdc}$, $I_E=0$, $f=1.0\text{MHz}$)		6.0	pF
Noise figure	$R_g=1\text{k}\Omega$ $V_{CE}=5.0\text{Vdc}$, $I_C=200\mu\text{A}$, $f=1.0\text{KHz}$		8.0	NF

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	

Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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