



Micro Commercial Components



Micro Commercial Components
130 W Cochran St, Unit B
Simi Valley, CA 93065
Tel:818-701-4933

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}	Collect 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	
$V_{CE(\text{sat})}$	Collector-Emitter Saturation Voltage ($I_C=10\text{ mA}$, $I_B=1.0\text{ mA}$)		0.15	Vdc
$V_{BE(\text{sat})}$	Base-Emitter Saturation Voltage ($I_C=10\text{ mA}$, $I_B=1.0\text{ mA}$)		1.0	Vdc

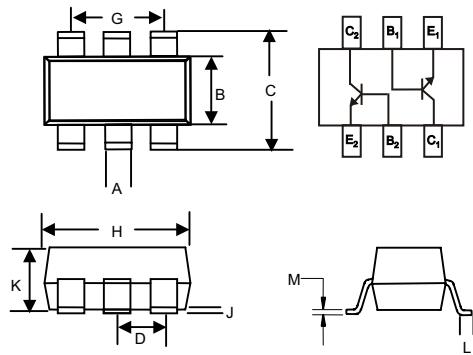
SMALL-SIGNAL CHARACTERISTICS

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	$R_g=1\text{ kohm}$ $V_{CE}=5.0\text{ Vdc}$, $I_C=200\mu\text{A}$, $f=1.0\text{ KHz}$		8.0	NF

MMDT5551

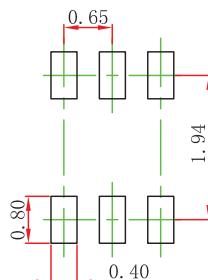
Plastic-Encapsulate Transistors

SOT-363

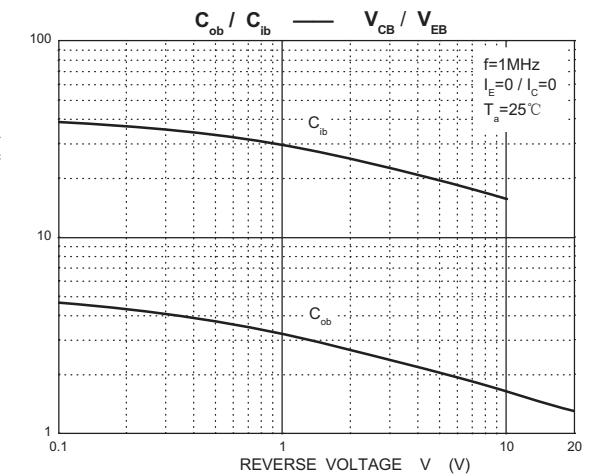
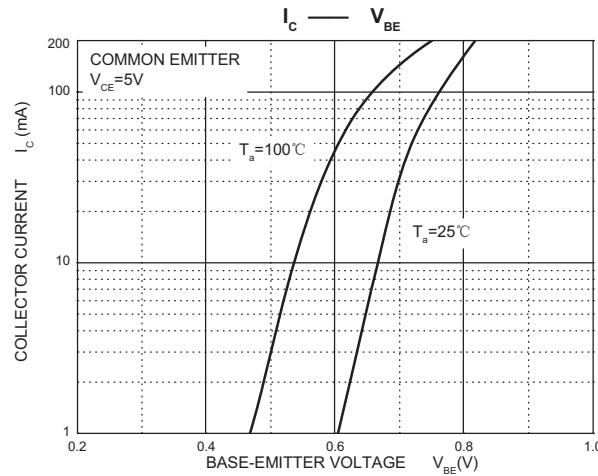
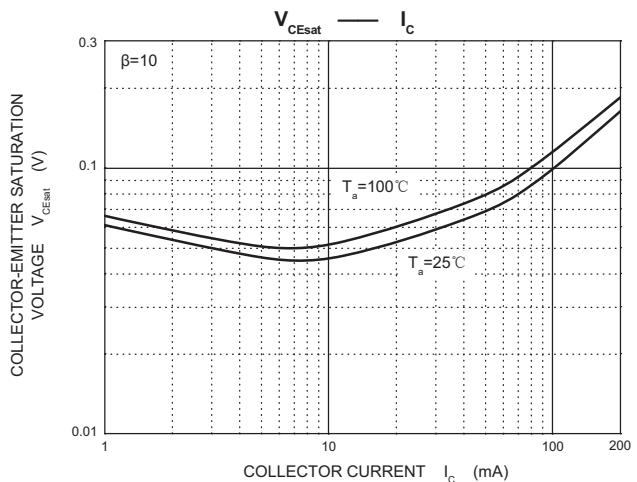
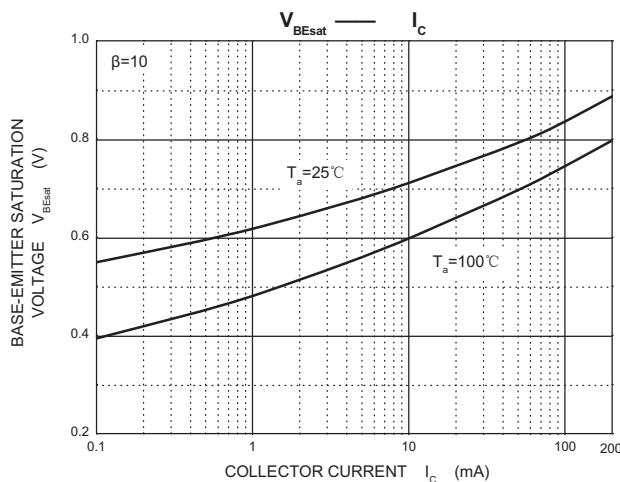
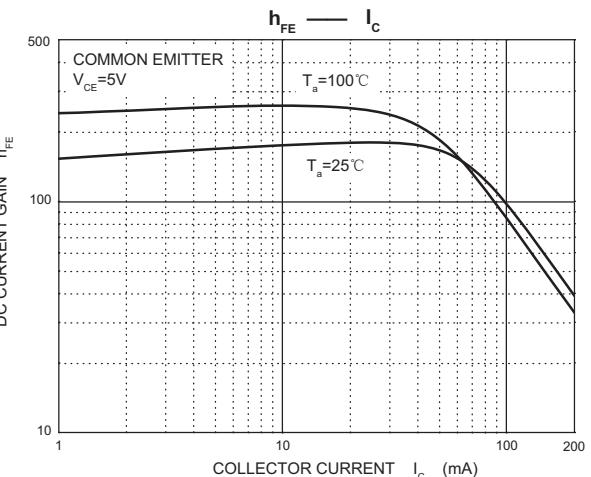
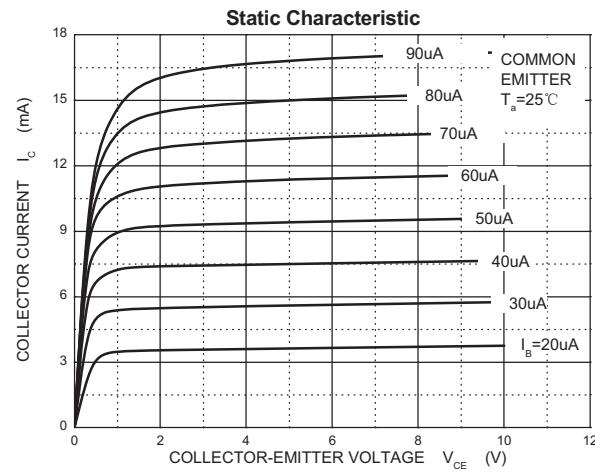


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.006	0.014	0.15	0.35	
B	0.045	0.053	1.15	1.35	
C	0.079	0.096	2.00	2.45	
D	0.026	Nominal	0.65	Nominal	
G	0.047	0.055	1.20	1.40	
H	0.071	0.087	1.80	2.20	
J	---	0.004	---	0.10	
K	0.035	0.043	0.90	1.10	
L	0.010	0.018	0.26	0.46	
M	0.003	0.006	0.08	0.15	

SUGGESTED SOLDER PAD LAYOUT



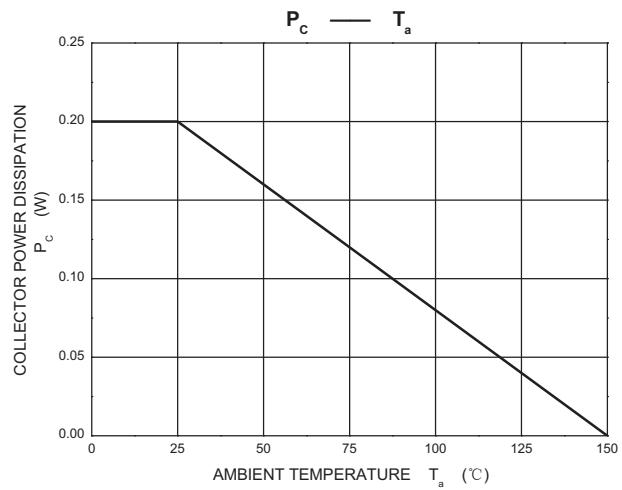
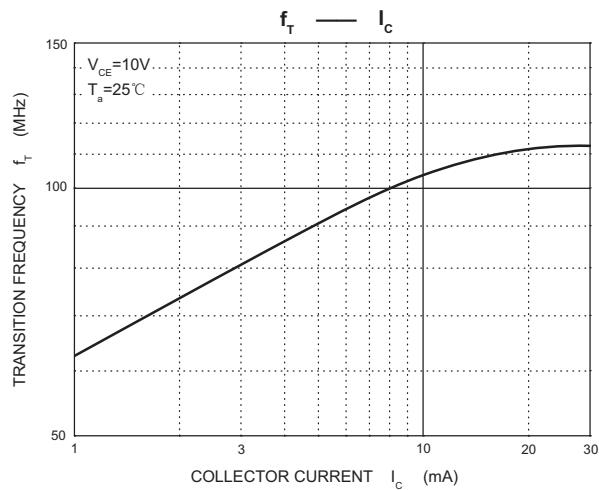
Typical Characteristics



Typical Characteristics

•M•C•C•

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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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