



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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## **MMDT5551**

## 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
- Moisure Sensitivity Level 1
  Capable of 200mWatts of Power Dissipation
- Ideal for Medium Power Amplification and Switching
- Operating and Storage Junction Temperatures: -55 ℃ to 150 ℃
- Marking:K4N

### Electrical Characteristics @ 25°C Unless Otherwise Specified

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

### **ON CHARACTERISTICS**

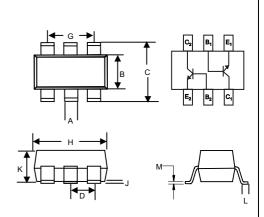
h <sub>FE</sub>	DC Current Gain* $(I_C=1 \text{mAdc}, V_{CE}=5.0 \text{Vdc})$ $(I_C=10 \text{mAdc}, V_{CE}=5.0 \text{Vdc})$	80 80	250	
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>C</sub> =10mAdc, I <sub>B</sub> =1.0mAdc)		0.15	Vdc
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage (I <sub>C</sub> =10mAdc, I <sub>B</sub> =1.0mAdc)		1.0	Vdc

### SMALL-SIGNAL CHARACTERISTICS

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f <sub>T</sub>	Current Gain-Bandwidth Product			
	$(I_C=10 \text{mAdc}, V_{CE}=20 \text{Vdc}, f=100 \text{MHz})$	100	300	MHz
$C_{obo}$	Output Capacitance			
	$(V_{CB}=5.0Vdec, I_{E}=0, f=1.0MHz)$		6.0	pF
Noice figure	Rg=1kohm			
Noise figure	V <sub>CE</sub> =5.0Vdec, IC=200uA, f=1.0KHz		8.0	NF

# **Plastic-Encapsulate Transistors**

# SOT-363



DIMENSIONS					
	INCHES MM		INCHES		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.006	.014	0.15	0.35	
В	.045	.053	1.15	1.35	
С	.085	.096	2.15	2.45	
D	.026		0.65Nominal		
G	.047	.055	1.20	1.40	
Н	.071	.087	1.80	2.20	
J		.004		0.10	
K	.035	.043	0.90	1.10	
L	.010	.018	0.26	0.46	
М	.003	.006	0.08	0.15	



#### **Micro Commercial Components**

### **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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