



## **Dual PNP Small Signal Transistor**

### **Features**

Epoxy meets UL-94 V-0 flammability rating

Surface mount package ideally Suited for Automatic Insertion

PNP

M

### **Mechanical Data**



# MMDT5401

## Maximum Ratings (Ta=25 Unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Collector-Base Voltage	VCBO	V	IC=-100μA,IE=0	-160
Collector-Emitter Voltage	VCEO	V	IC=-1mA,IB=0	-150
Emitter-Base Voltage	VEBO	V	IE=-10μA,IC=0	-5
Collector Current -Continuous	IC	mA		-600
Total Device Dissipation	PC	mW		200
Junction Temperature	Tj			150
Storage Temperature	TSTG			-55 to +150

## Electrical Characteristics (Ta=25 unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	TYP	Max
Collector-base breakdown voltage	V <sub>CBO</sub>	V	IC=-100μA,IE=0	-160		
Collector-emitter breakdown voltage	V <sub>CEO</sub>	V	IC=-1mA,IB=0	-150		
Emitter-base breakdown voltage	V <sub>EBO</sub>	V	IE=-10μA,IC=0	-5		
Collector cut-off current	I <sub>CBO</sub>	nA	VCB=-120V,IE=0			-50
Emmitter cut-off current	I <sub>EBO</sub>	nA	VEB=-3V, IC=0			-50
DC current gain	h <sub>FE1</sub>		VCE=-5V,IC=-1mA	50		
	h <sub>FE2</sub>		VCE=-5V,IC=-10mA	100		300
	h <sub>FE3</sub>		VCE=-5V,IC=-50mA	50		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	V	IC=-10mA,IB=-1mA			-0.2
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	V	IC=-50mA,IB=-5mA			-0.5
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	V	IC=-10mA,IB=-1mA			-1
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	V	IC=-50mA,IB=-5mA			-1
Output Capacitance	Cob	pF	VCB=-10V, IE=0, f=1.0MHz			6
Transition frequency	f <sub>T</sub>	MHz	VCE=-10V,IC=-10mA,f=100MHz	100		
Noise Figure	NF	dB	VCE=-5V, IC=-0.2mA, f=1kHz, RS=10			8

## Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM
---------------	--------------	----------------	---------



**Characteristics** (Typical)

A





## Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.