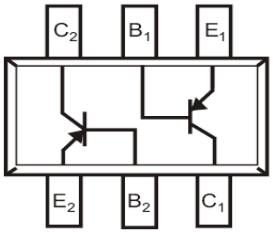
Dual PNP Small Signal Surface Mount Transistor MMDT5401

FEATURES

- Epitaxial planar die construction.
- Complementary NPN type available MMDT5551.
- Ultra-small surface mount package.

Lead-free



SOT-363

APPLICATIONS

- For Low power amplification and switching.

ORDERING INFORMATION

Type No.	Marking	Package Code
MMDT5401	K4M	SOT-363

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Unit**
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-200	mA
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	625	℃/W
T_j, T_{stg}	Junction and Storage Temperature	-55 to+150	℃

Dual PNP Small Signal Surface Mount Transistor MMDT5401

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA I_E=0	-160	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1.0mA I_B=0	-150	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-10μA I_C=0	-5	-	V
Collector cut-off current	I_{CBO}	V_{CB}=-120V I_E=0 V_{CB}=-120V I_E=0 T_A=100℃	-	-50	nA μA
Emitter cut-off current	I_{EBO}	V_{EB}=-3V I_C=0	-	-50	nA
DC current gain	h_{FE}	V_{CE}=-5V I_C=-1.0mA	50	-	-
		V_{CE}=-5V I_C=-10mA	60	240	
		V_{CE}=-5V I_C=-50mA	50	-	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-10mA I_B=-1.0mA I_C=-50mA I_B=-5.0mA	-	-0.2 -0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-10mA I_B=-1.0mA I_C=-50mA I_B=-5.0mA	-	-1.0	V
Transition frequency	f_T	V_{CE}=-10V I_C=-10mA f=100MHz	100	300	MHz
Output Capacitance	C_{obo}	V_{CB}=-10V,f=1.0MHz,I_E=0	-	6	pF
Noise Figure	NF	V_{CE}=-5V I_C=-200μA f=1.0KHz	-	8.0	dB

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

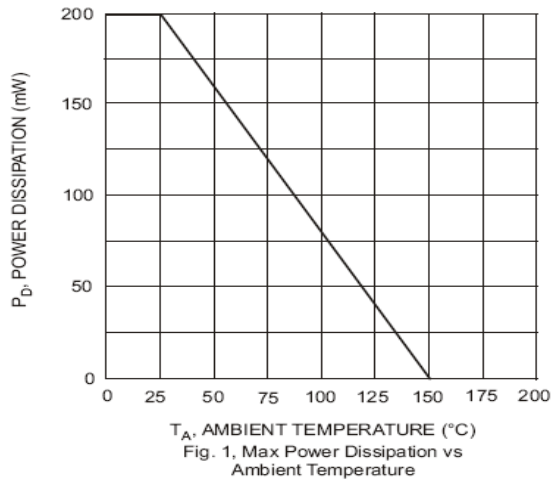


Fig. 1, Max Power Dissipation vs Ambient Temperature

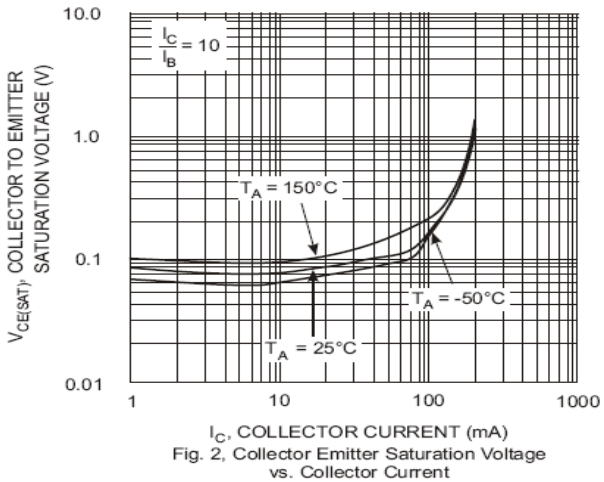
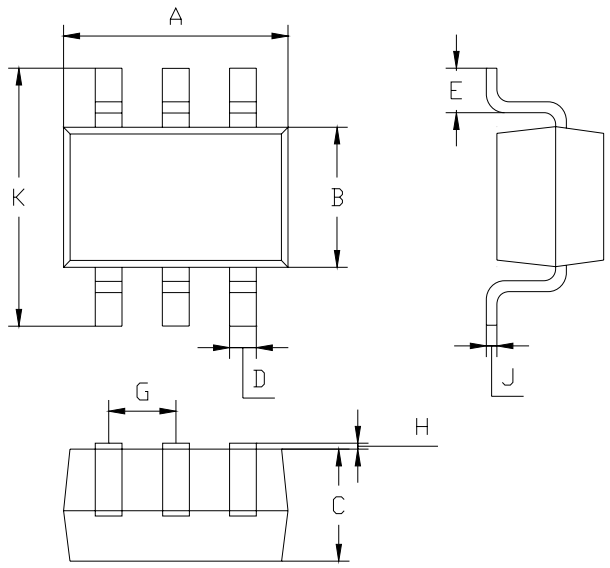


Fig. 2, Collector Emitter Saturation Voltage vs. Collector Current

Dual PNP Small Signal Surface Mount Transistor MMDT5401

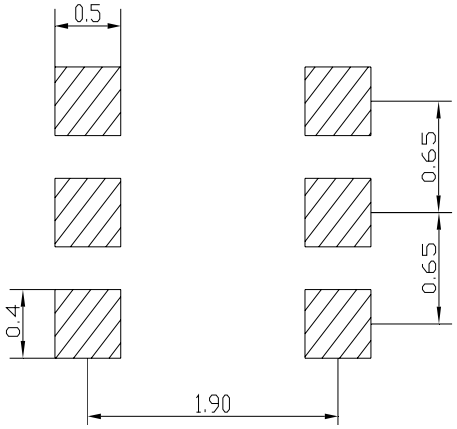
PACKAGE OUTLINE

Plastic surface mounted package SOT-363



SOT-363		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1.0Typical	
D	0.10	0.30
E	0.25	0.40
G	0.65Typical	
H	0.02	0.10
J	0.1Typical	
K	2.1	2.3
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMDT5401	SOT-363	3000/Tape&Reel