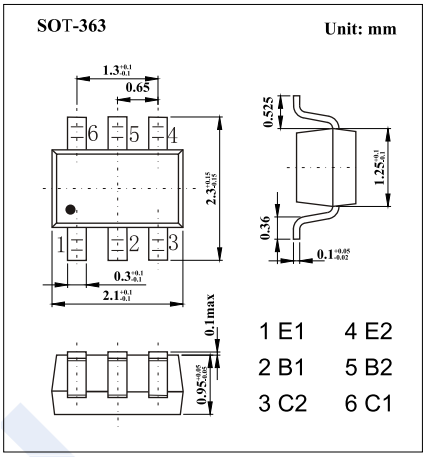
PNP Transistors

MMDT5401 (KMDT5401)



■ Features

- Epitaxial Planar Die Construction
- Ideal for Medium Power Amplification and Switching
- Dual Transistors (PNP+PNP)
- Complementary NPN Type Available(MMDT 5551)

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-160	V
Collector - Emitter Voltage	V_{CEO}	-150	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-0.2	A
Collector Power Dissipation	P_C	0.2	W
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E=0	-160			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -1 mA, I_B=0	-150			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -120 V , I_E=0			-0.05	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -4V , I_C=0			-0.05	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-10 mA, I_B=-1mA			-0.2	V
		I_C=-50 mA, I_B=-5mA			-0.5	
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-10 mA, I_B=-1mA			-1	
		I_C=-50 mA, I_B=-5mA			-1	
DC current gain	$h_{FE(1)}$	V_{CE}= -5V, I_C= -1mA	50			
	$h_{FE(2)}$	V_{CE}=- 5V, I_C= -10mA	100		300	
	$h_{FE(3)}$	V_{CE}=- 5V, I_C= -50mA	50			
Noise Figure	NF	V_{CE}= -5.0V, I_C= -200μA, R_S= 10Ω,f = 1kHz			8	dB
Collector output capacitance	C_{ob}	V_{CB}= -10V, I_E= 0,f=1MHz			6	pF
Transition frequency	f_T	V_{CE}= -10V, I_C= -10mA,f=100MHz	100			MHz

■ Marking

Marking	K4M