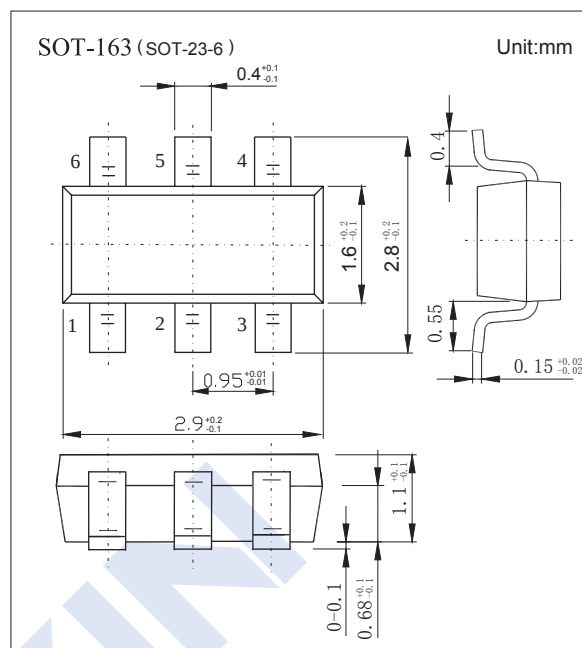
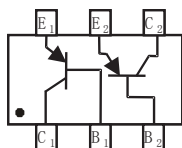


PNP Transistors

DMMT5401 (KMMT5401)

■ Features

- Epitaxial Planar Die Construction
- Complementary NPN Type Available (DMMT5551)
- Ideal for Medium Power Amplification and Switching
- Intrinsically Matched PNP Pair (Note 1)
- 2% Matched Tolerance, h_{FE} , $V_{CE(SAT)}$, $V_{BE(SAT)}$
- 1% Matched Tolerance, Available (Note 2)
- Also Available in Lead Free Version
- Marking:K4S

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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	-200	mA
Collector Power Dissipation	P_D	300	mW
Thermal Resistance, Junction to Ambient (Note 3)	$R_{\theta JA}$	417	K/W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to +150	

Notes:

1. Built with adjacent die from a single wafer.
2. Contact sales department.
3. Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch.

PNP Transistors

DMMT5401 (KMMT5401)

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	VCBO	IC = -100 μ A, IE = 0	-160			V
Collector- emitter breakdown voltage	VCEO	IC = -1 mA, IB = 0	-150			
Emitter - base breakdown voltage	VEBO	IE = -100 μ A, IC = 0	-5			
Collector-base cut-off current	ICBO	VCB = -120V, IE = 0			-50	nA
		VCB = -120V, IE = 0, TA = 100°C				μ A
Emitter cut-off current	IEBO	VEB = -3.0V, IC = 0			-50	nA
Collector-emitter saturation voltage	VCE(sat)	IC = -10mA, IB = -1.0mA			-0.2	V
		IC = -50mA, IB = -5.0mA			-0.5	
Base - emitter saturation voltage	VBE(sat)	IC = -10mA, IB = -1.0mA			-1	
		IC = -50mA, IB = -5.0mA				
DC current gain	hFE	IC = -1.0mA, VCE = -5.0V	50			
		IC = -10mA, VCE = -5.0V	60		240	
		IC = -50mA, VCE = -5.0V	50			
Small Signal Current Gain		VCE = -10V, IC = -1.0mA, f = 1.0kHz	40			
Collector output capacitance	Cobo	VCB = -10V, f = 1.0MHz, IE = 0			6	pF
Transition frequency	fr	VCE = -10V, IC = -10mA, f = 100MHz	100		300	MHz
Noise Figure	NF	VCE = -5.0V, IC = -200 μ A RS = 10 Ω , f = 1.0kHz			8	dB

PNP Transistors

DMMT5401 (KMMT5401)

■ Typical Characteristics

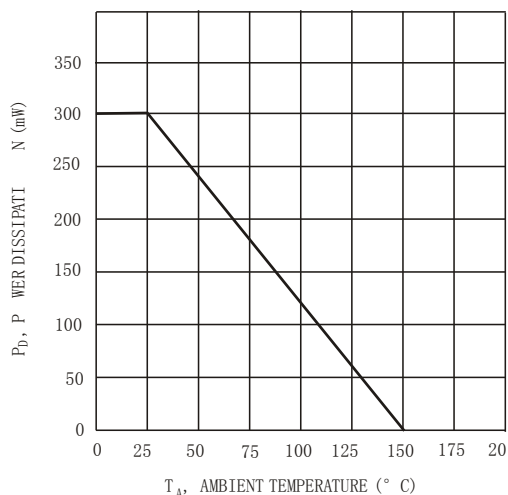


Fig. 1, Max Power Dissipation vs Ambient Temperature

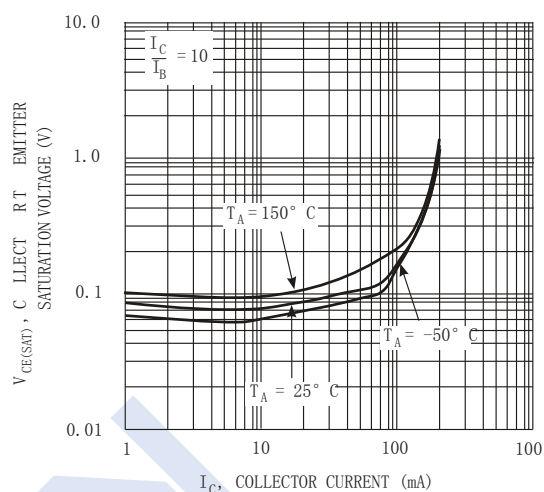


Fig. 2, Collector Emitter Saturation Voltage vs. Collector Current

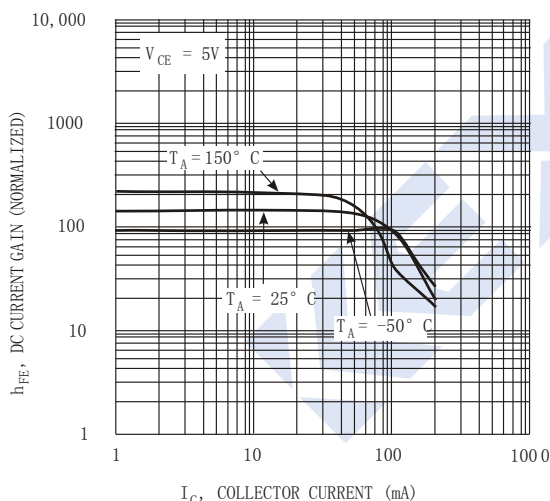


Fig. 3, DC Current Gain vs Collector Current

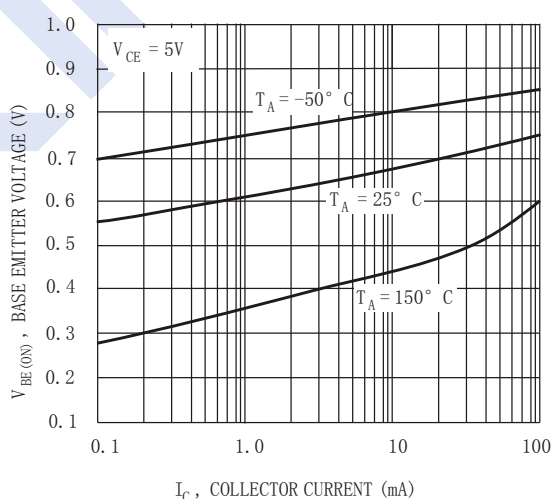


Fig. 4, Base Emitter Voltage vs. Collector Current

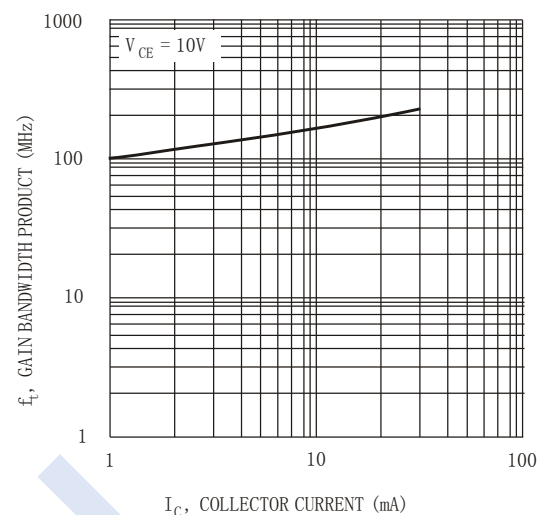


Fig. 5, Gain Bandwidth Product vs Collector Current