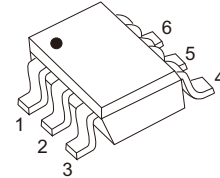


Features

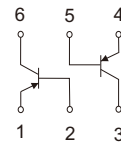
- Complementary to MMDT5551
- Epitaxial Planar Die Construction
- Ideal for Medium Power Amplification and Switching

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Mechanical Data

- Case: SOT-363
- Terminals: Plated solderable per MIL-STD-750, method 2026
- Mounting Position: Any
- Marking: K4M



Maximum Ratings ($T_A=25^\circ\text{C}$ Unless otherwise specified)

Parameter	Symbol	Unit	Value
Collector-Emitter Voltage	V_{CEO}	V	-150
Collector-Base Voltage	V_{CBO}	V	-160
Emitter-Base Voltage	V_{EBO}	V	-5.0
Collector Current, Continuous	I_c	mA	-200
Power Dissipation	P_D	mW	200
Operation Junction Temperature	T_J	$^\circ\text{C}$	-55 to +150
Storage Temperature	T_{STG}	$^\circ\text{C}$	-55 to +150

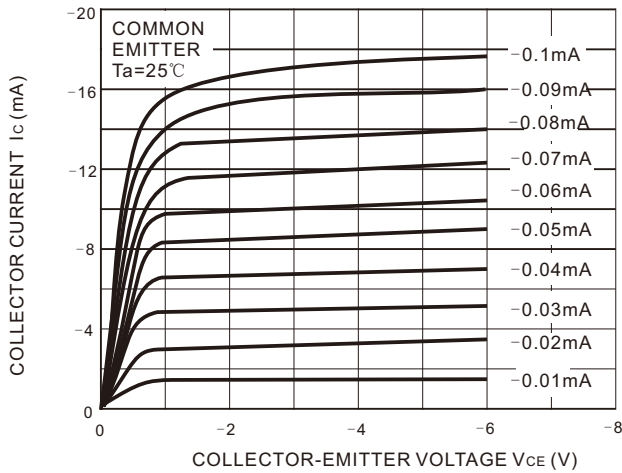
Electrical Characteristics($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	V	$I_C = -1\text{mA}, I_B = 0$	-150	---
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	V	$I_C = -100\mu\text{A}, I_E = 0$	-160	---
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	V	$I_E = -10\mu\text{A}, I_C = 0$	-5.0	---
Collector cut-off Current	I_{CBO}	nA	$V_{CB} = -120\text{V}, I_E = 0$	---	-50
Emitter cut-off Current	I_{EBO}	nA	$V_{EB} = -3\text{V}, I_C = 0$	---	-50
DC Current Gain	$h_{FE(1)}$		$I_C = -1\text{mA}, V_{CE} = -5\text{V}$	50	---
	$h_{FE(2)}$		$I_C = -10\text{mA}, V_{CE} = -5\text{V}$	100	300
	$h_{FE(3)}$		$I_C = -50\text{mA}, V_{CE} = -5\text{V}$	50	---
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	V	$I_C = -10\text{mA}, I_B = -1\text{mA}$	---	-0.20
			$I_C = -50\text{mA}, I_B = -5\text{mA}$	---	-0.50
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	V	$I_C = -10\text{mA}, I_B = -1\text{mA}$	---	-1.00
			$I_C = -50\text{mA}, I_B = -5\text{mA}$	---	-1.00
Current Gain-Bandwidth Product	f_T	MHz	$I_C = -10\text{mA}, V_{CE} = -10\text{V}$ $f = 100\text{MHz}$	100	
Output Capacitance	C_{ob}	pF	$V_{CB} = -10\text{V}, f = 1.0\text{MHz}, I_E = 0$	---	6
Noise Figure	NF	dB	$V_{CE} = -5.0\text{V}, f = 1\text{KHz}$, $I_C = -200\mu\text{A}, R_S = 10\Omega$	---	8

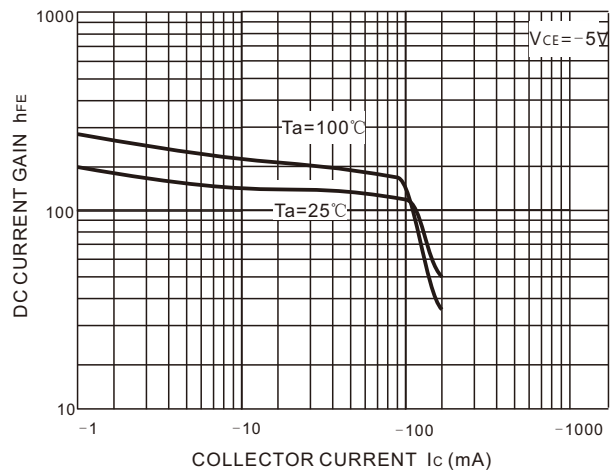
Pulse test:pulse width $\leq 300\mu\text{s}$,duty cycle $\leq 2.0\%$

Characteristics(Typical)

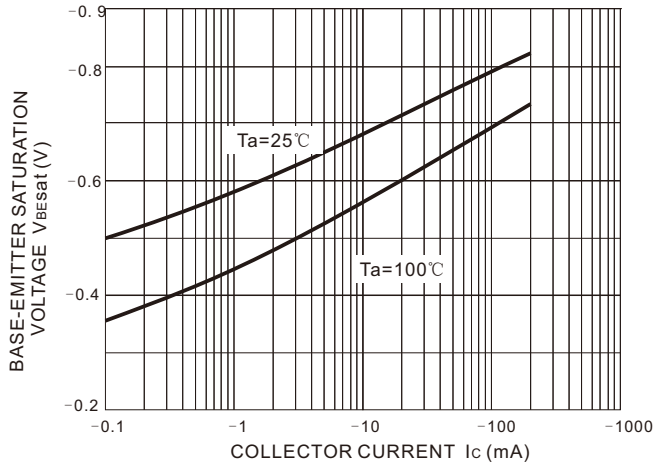
Static Characteristic



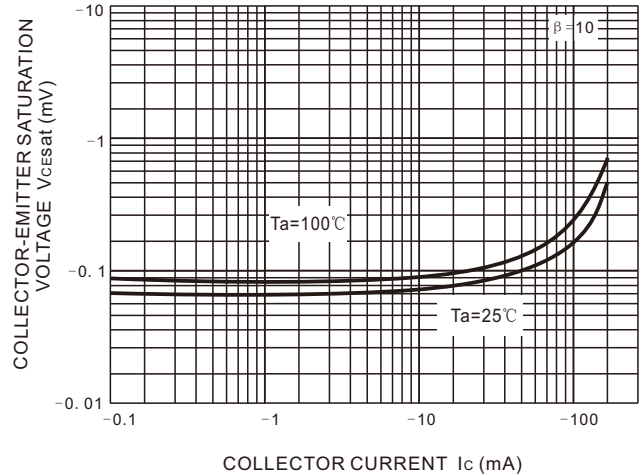
$h_{FE} - I_c$



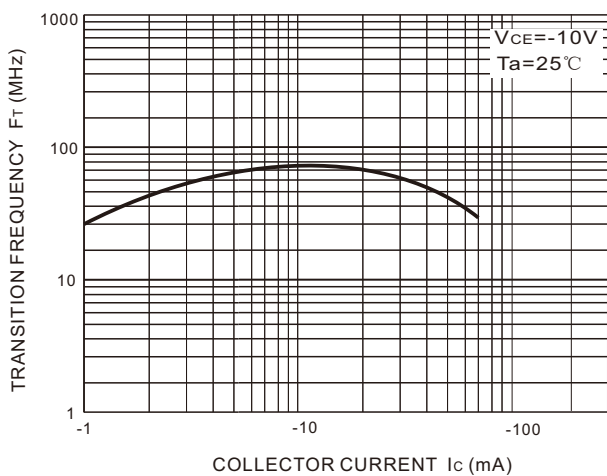
$V_{BEsat} - I_c$



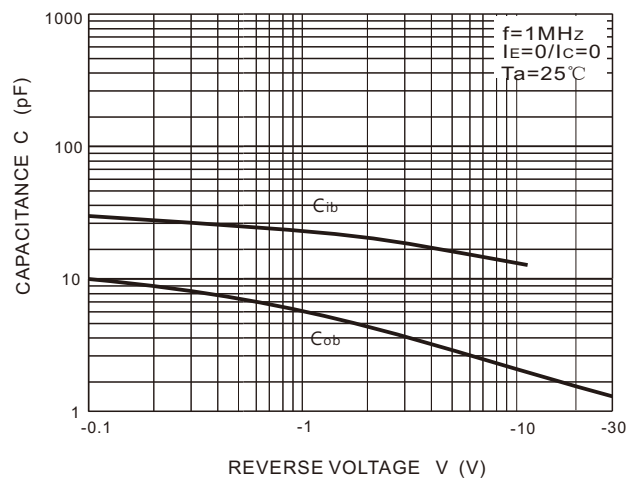
$V_{CEsat} - I_c$

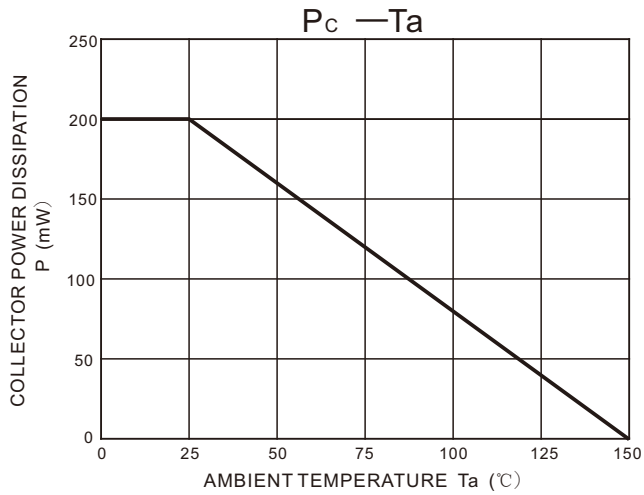


$f_T - I_c$



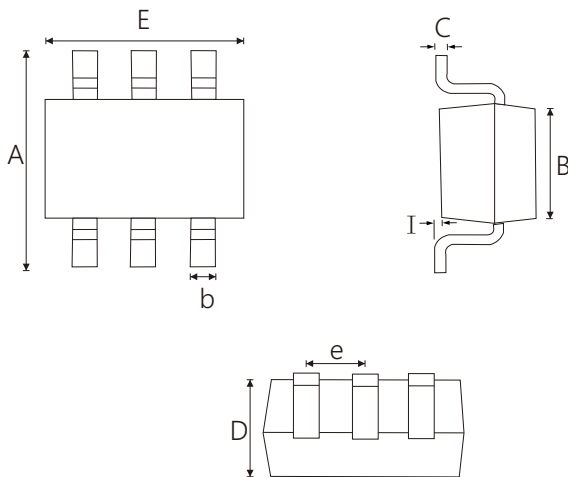
$C_{ob}/C_{ib} - V_{CB}/V_{EB}$





Outline Dimensions

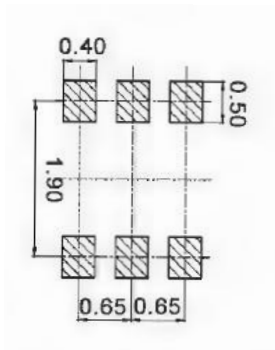
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Dim	Min	Max
A	2.15	2.45
B	1.15	1.35
C	0.05	0.15
D	0.90	1.00
E	2.00	2.20
e	0.60	0.70
b	0.15	0.35
I	0.02	0.10

Dimensions in millimeters

Suggested pad layout



Note:
 1. Dimension: mm
 2. General tolerance: ± 0.05 mm
 3. The pad layout is for reference purposes only

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