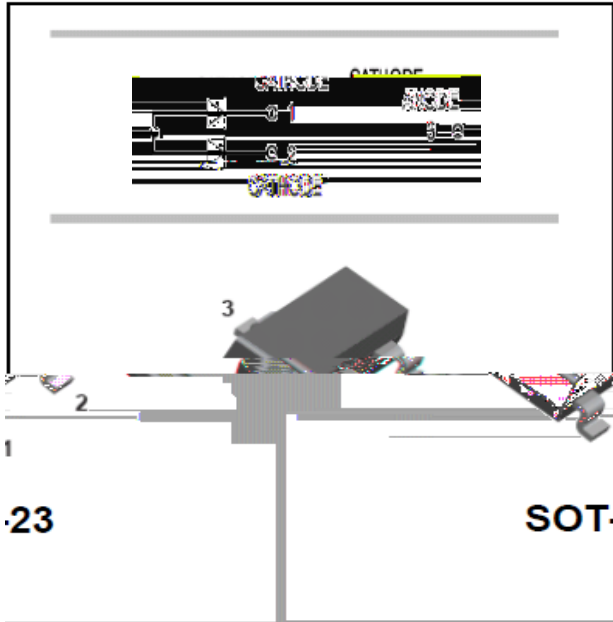


PNP Transistor



Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisture Resistant
- Surface Mount Package Ideally Suited for Automatic Insertion

Mechanical Data

- **Package:** SOT-323
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** K3F

■ Maximum Ratings (Vd)

		Unit	Value
Collector-Base Voltage	V_{CBO}	V	-60
Collector-Emitter Voltage	V_{CEO}	V	-60
Emitter-Base Voltage	V_{EBO}	V	-5
Collector Current	I_C	mA	-600
Collector Power Dissipation	P_C	mW	200
Operation Junction Temperature	T_j		150
Storage Temperature	T_{stg}		-55 to +150

**■ Electrical Characteristics** (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	V_{CBO}	V	$I_C = -10\mu A, I_E = 0$	-60		
Collector-emitter breakdown voltage	V_{CEO^*}	V	$I_C = -10mA, I_B = 0$	-60		
Emitter-base breakdown voltage	V_{EBO}	V	$I_E = -10\mu A, I_C = 0$	-5		
Collector-emitter cut-off current	I_{CEO}	nA	$V_{CE} = -3$			-50
Collector-base cut-off current	I_{CBO}	nA	$V_{CB} = -50V$			-10
Emitter-base cut-off current	I_{EBO}	nA	$V_{EB} = -3V$			-10
DC current gain	h_{FE}		$V_{CE} = -10V$ mA	100		
	h_{FE}		$V_{CE} = -10V$ 50mA	100		300
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	$I_C = -500mA, I_B = -50mA$			-1.6
Base-emitter saturation voltage	$V_{BE(sat)}$	V	$I_C = -500mA, I_B = -50mA$			-2.6
Transition frequency	f_T	MHz	$V_{CE} = -20V$ 0mA, f=100MHz	200		
Delay time	t_d	ns	$V_{CC} = -3V$ $I_C = -150mA, I_{B1} = -15mA$			10
Rise time	t_r	ns				25
Storage time	t_s	ns	$V_{CC} = -6V$ 150mA, $I_{B1} = I_{B2} = -15mA$			225
Fall time	t_f	ns				60

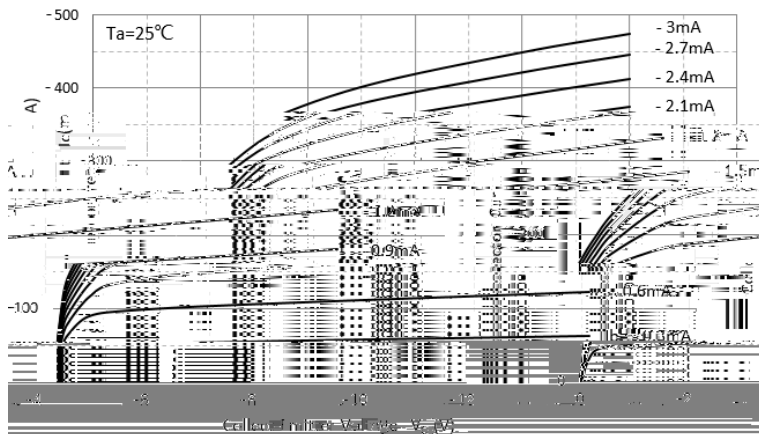
■ Ordering Information (Example)

Preferred P/N	Packing Code	Unit Weight(G)	Minimum Package(Pcs)	Inner Box Quantity(Pcs)	Outer Carton Quantity(Pcs)	Delivery Mode
MMST2907A	F2	Approximate 0.005	3000	30000	120000	7" reel

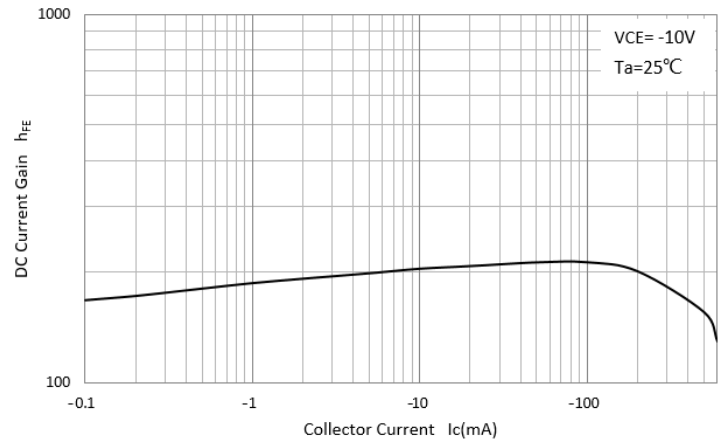


■ Characteristics (Typical)

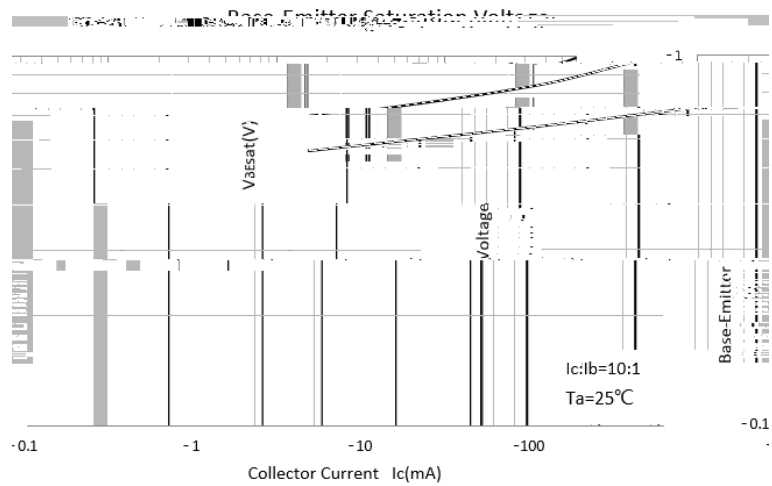
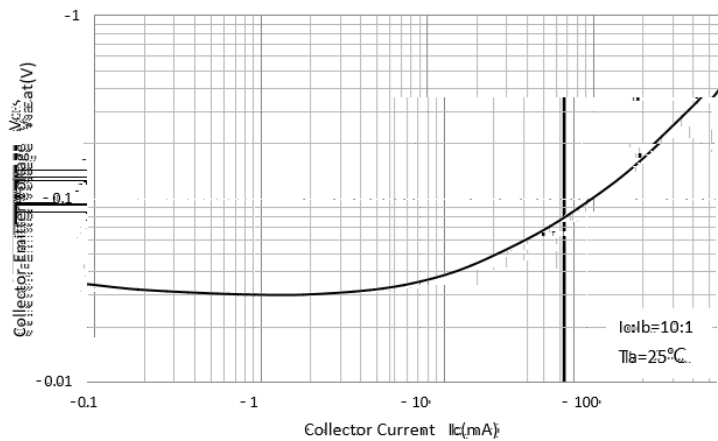
Static Characteristic



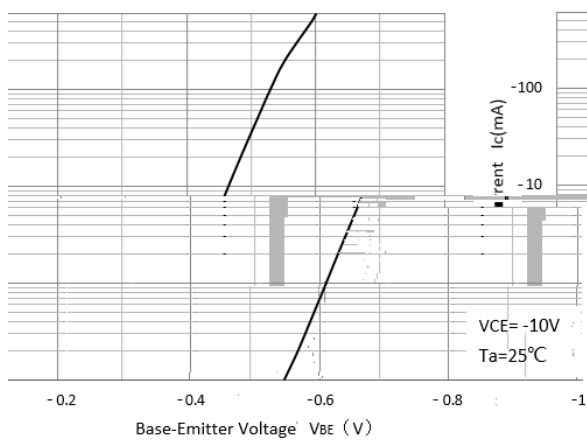
DC Current Gain



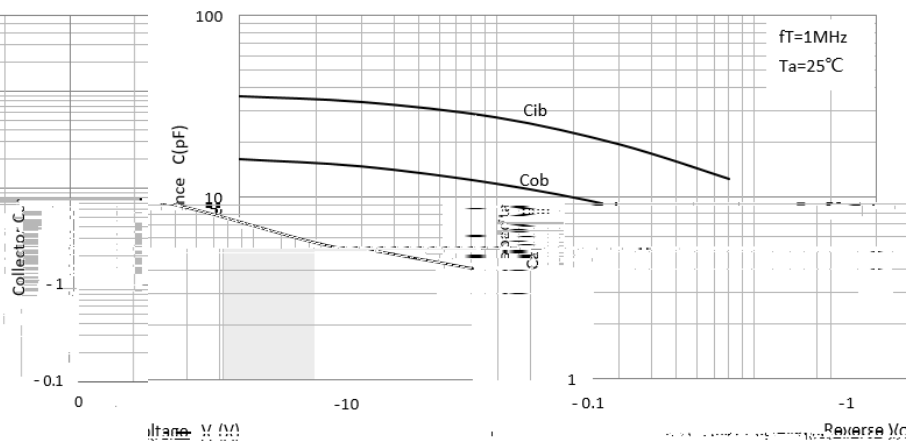
Collector-Emitter Saturation Voltage



Base-Emitter On Voltage



Cob/Cib-Vcb/Veb



MMST2907A

