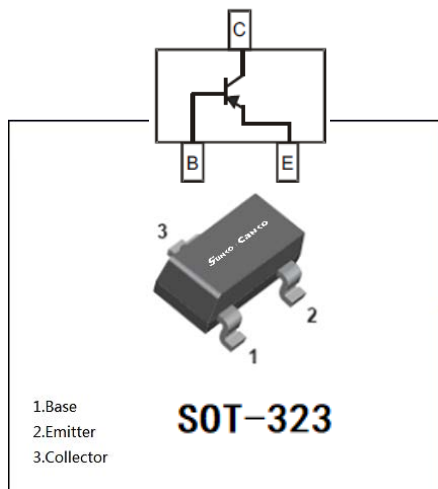


PNP Silicon High Voltage Transistor



Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisture Sensitivity Level 1
- Surface mount package ideally Suited for Automatic Insertion
- PNP

Mechanical Data

- **Package:** SOT-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** K3R

■Maximum Ratings (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Conditions	Value
Collector-Base Voltage	V_{CBO}	V	$I_C = -100\mu A, I_E = 0$	-300
Collector-Emitter Voltage	V_{CEO}	V	$I_C = -1mA, I_B = 0$	-300
Emitter-Base Voltage	V_{EBO}	V	$I_E = -100\mu A, I_C = 0$	-5
Collector Current	I_C	mA		-100
Collector Power Dissipation	P_C	mW		200
Operation Junction Temperature	T_j	°C		-55 to +150
Storage Temperature	T_{stg}	°C		-55 to +150

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Max
Collector-base breakdown voltage	V_{CBO}	V	$I_C = -100\mu A, I_E = 0$	-300	
Collector-emitter breakdown voltage	V_{CEO}	V	$I_C = -1mA, I_B = 0$	-300	
Emitter-base breakdown voltage	V_{EBO}	V	$I_E = -100\mu A, I_C = 0$	-5	
Collector-base cut-off current	I_{CBO}	nA	$V_{CB} = -200V, I_E = 0$		-250
Emitter-base cut-off current	I_{EBO}	nA	$V_{EB} = -5V, I_C = 0$		-100
DC current gain	h_{FE}		$V_{CE} = -10V, I_C = -1mA$	60	
	h_{FE}		$V_{CE} = -10V, I_C = -10mA$	100	200
	h_{FE}		$V_{CE} = -10V, I_C = -30mA$	60	
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	$I_C = -20mA, I_B = -2mA$		-0.4
Base-emitter saturation voltage	$V_{BE(sat)*}$	V	$I_C = -20mA, I_B = -2mA$		-0.9

MMSTA92

■Other Characteristics (T_a=25°C Unless otherwise specified)

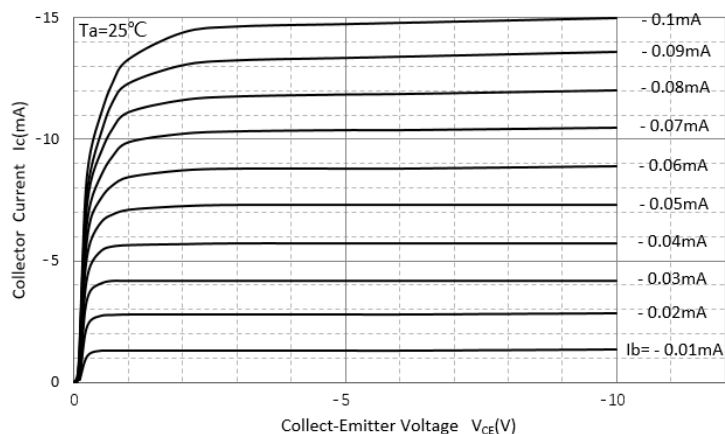
Item	Symbol	Unit	Conditions	Min	Max
Transition frequency	Ft	MHz	VCE=-20V, IC=-10mA, f=30MHz	50	

■Ordering Information (Example)

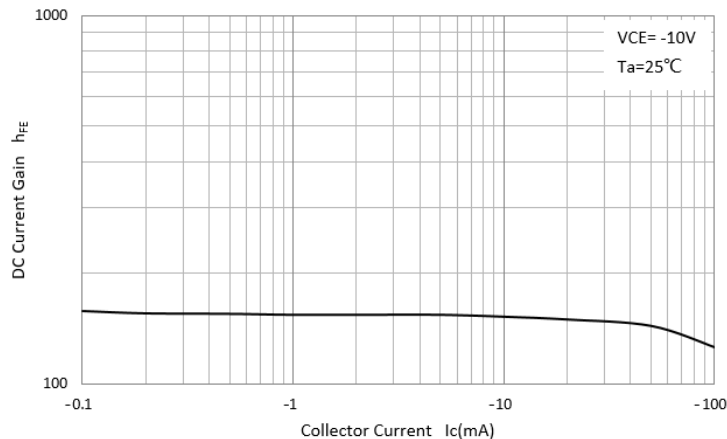
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMSTA92	F2	Approximate 0.005	3000	30000	120000	7" reel

■Characteristics(Typical)

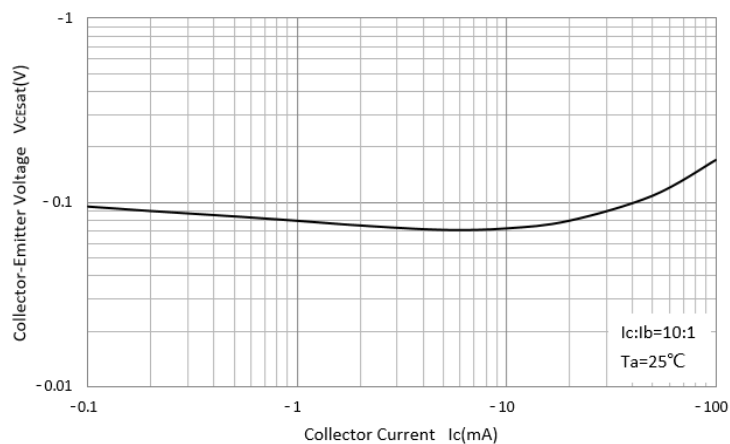
Static Characteristic



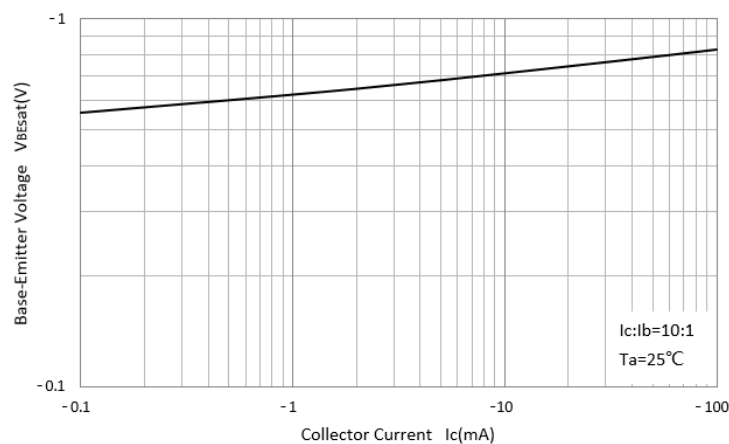
DC Current Gain



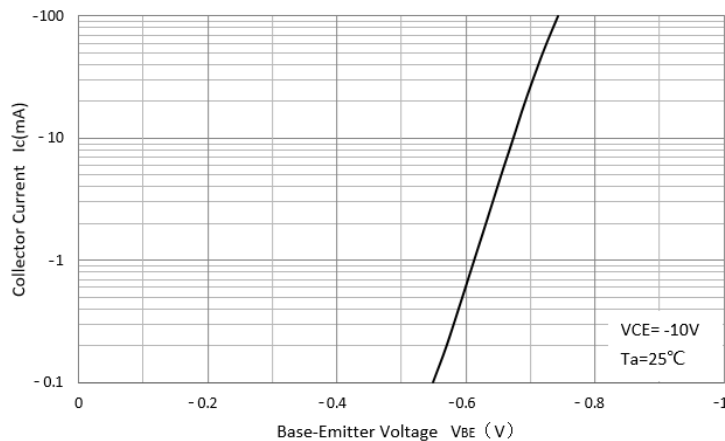
Collector-Emittor Saturation Voltage



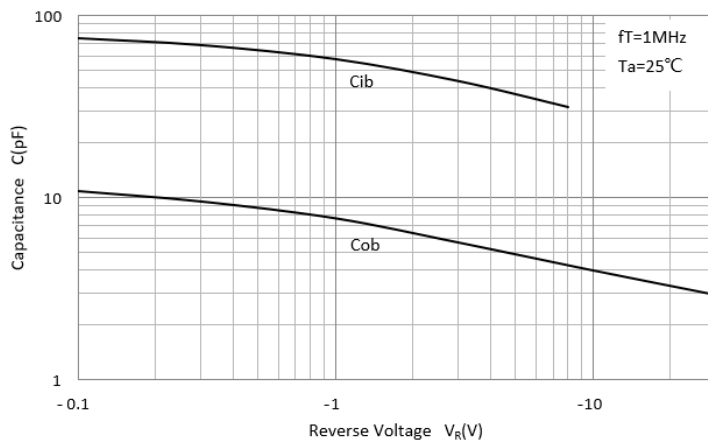
Base-Emittor Saturation Voltage



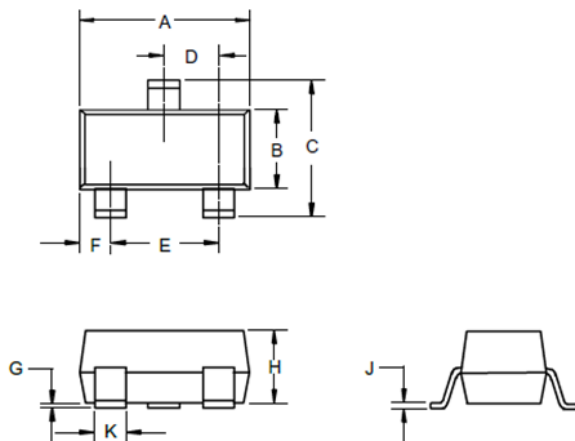
Base-Emittor On Voltage



Cob/Cib- V_{CB}/V_{EB}

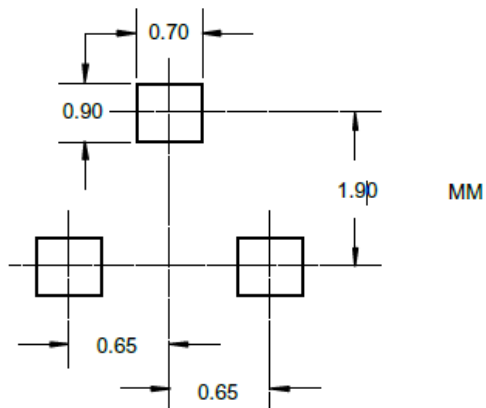


■ SOT-323 Package Outline Dimensions



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

■ SOT-323 Soldering Footprint



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