# NPN General Purpose Transistor **SSTA06 / MMSTA06**

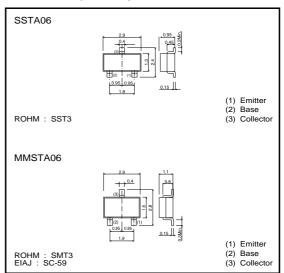
### ●Features

- 1) BVcEo < 80V (Ic=1mA)
- 2) Complements the SSTA56 / MMSTA56.

# Package, marking and packaging specifications

Part No.	SSTA06	MMSTA06
Packaging type	SST3	SMT3
Mark	R1G	R1G
Code	T116	T146
Basic ordering unit (pieces)	3000	3000

# ●Dimensions (Unit:mm)



# ● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	Vсво	80	٧
Collector-emitter voltage	VCEO	80	V
Emitter-base voltage	VEBO	4	V
Collector current	Ic	0.5	Α
Collector power dissipation	Pc	0.2	W
Collector power dissipation	FC	0.35	W *
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

<sup>\*</sup> Mounted on 7x5x0.6mm ceramic substrate

### ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Collector-base breakdown voltage	ВУсво	80	-	-	V	Ic=100μA
Collector-emitter breakdown voltage	BVceo	80	-	-	V	Ic=1mA
Emitter-base breakdown voltage	BVEBO	4	-	-	V	IE=100μA
Collector cutoff current	Ісво	-	-	0.1	μА	Vcb=80V
	ICEO	-	-	1		Vce=60V
Collector-emitter saturation voltage	VCE(sat)	-	-	0.25	V	Ic/Iв=100mA/10mA
Base-emitter saturation voltage	VBE(ON)	-	-	1.2	V	Vce/lb=1V/100mA
DC current transfer ratio	hFE -	100	-	-	-	Vce=1V, IC=10mA
		100	-	-		Vce=1V, IC=100mA
Transition frequency	f⊤	100	-	-	MHz	Vc=2V, IE= -10mA, f=100MHz

### •Electrical characteristics curves

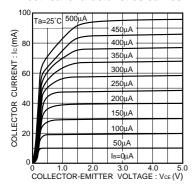


Fig.1 Grounded emitter output characteristics

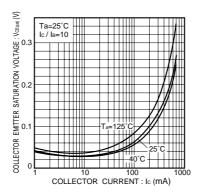


Fig.2 Collector-emitter saturation voltage vs. collector current

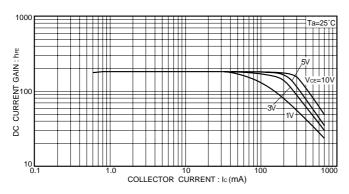


Fig.3 DC current gain vs. collector current ( I )

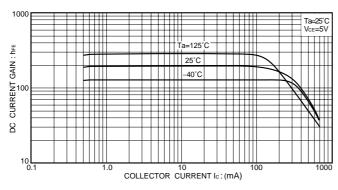


Fig.4 DC current gain vs. collector current (II)

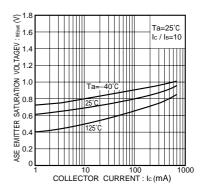


Fig.5 Base-emitter saturation voltage vs. collector current

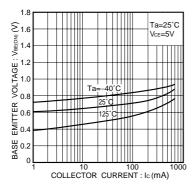


Fig.6 Grounded emitter propagation characteristics

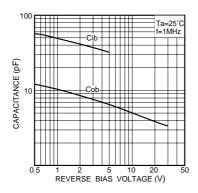


Fig.7 Input / output capacitance vs. voltage

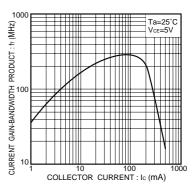


Fig.8 Gain bandwidth product vs. collector current

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