NPN general purpose transistor **SSTA28 / MMSTA28**

Features

1) BVcEs < 80V (Ic=100μA)

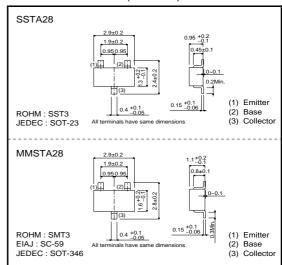
Package, marking and packaging specifications

Part No.	SSTA28	MMSTA28
Packaging type	SST3	SMT3
Marking	RAT	RAT
Code	T116	T146
Basic ordering unit (pieces)	3000	3000

● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	Vсво	80	V
Collector-emitter voltage	Vceo	80	V
Emitter-base voltage	VEBO	12	V
Collector current	Ic	0.3	Α
Collector power dissipation	Pc	0.2	W
Junction temperature	Tj	150	°C
Storage temperature	Teta	55 to ±150	°C

●External dimensions (Unit : mm)



●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	BVces	80	-	_	V	Ic = 100μA
Emitter-base breakdown voltage	ВVево	12	-	-	V	Ιε = 10μΑ
Collector cutoff current	Ісво	_	_	0.1	μΑ	Vcb = 60V
	Івео	_	-	0.1	μΑ	VEB = 10V
	Ices	-	-	0.5	μΑ	Vce = 10V
Collector-emitter saturation voltage	VcE(sat) 1	-	0.7	1.2	V	Ic/I _B = 10mA/10μA
	VcE(sat) 2	-	0.8	1.5	V	Ic/I _B = 100mA/0.1mA
Base-emitter saturation voltage	V _{BE(on)}	-	1.4	2.0	V	Vce/lb = 5V/100mA
DC current transfer ratio	hfe	10000	-	_		Vce = 5V , Ic = 10mA
		10000	-	-	_	Vce = 5V , Ic = 100mA
Transition frequency	f⊤	125	200	-	MHz	Vce = 5V , Ie = 10mA , f = 100MHz
Output Capecitance	Cob	-	5.0	8.0	pF	Vcb = 10V , IE = 0 , f = 1MHz

Electrical characteristic curves

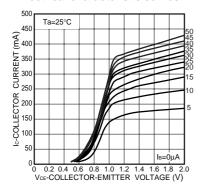


Fig.1 Grounded emitter output characteristics

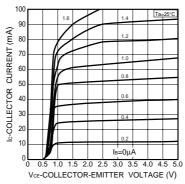


Fig.2 Typical output characteristics

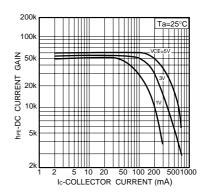


Fig.3 DC current gain vs. collector current (II)

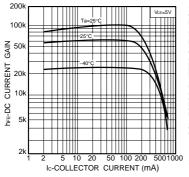


Fig.4 DC current gain vs. collector

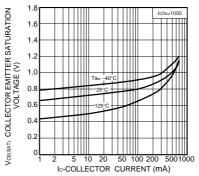


Fig.5 Collecor emitter saturation voltage vs collector current

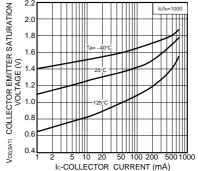


Fig.6 Base emitter saturation voltage vs collector current

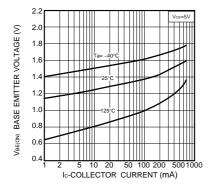


Fig.7 Base emitter "ON" voltage vs collector current

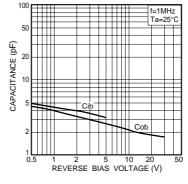


Fig.8 Capacitance vs reverse bias voltage

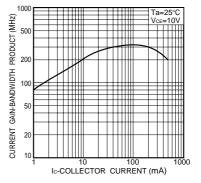


Fig.9 Current gain-bandwdth product vs collector current

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