

Transistors

NPN small signal transistor

MMST6428

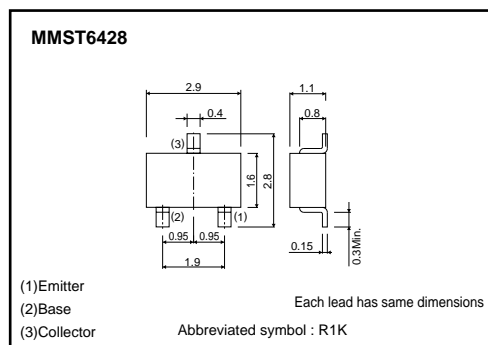
●Features

1) Ideal for switching and AF amplifier applications.

●Packaging specifications

Type	Package	Taping
	Code	T146
	Basic ordering unit (pieces)	3000
MMST6428		○

●Dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V _{CB0}	60	V
Collector-emitter voltage	V _{CE0}	50	V
Emitter-base voltage	V _{EB0}	6	V
Collector current	I _c	0.2	A
Collector power dissipation	P _c	0.2	W
Junction temperature	T _j	125	°C
Storage temperature	T _{stg}	-55 to 125	°C

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-emitter breakdown voltage	BV _{CEO}	50	-	-	V	I _c = 1mA
Emitter-base breakdown voltage	BV _{CB0}	60	-	-	V	I _c = 100μA
Collector-base cutoff current	I _{CB0}	-	-	0.1	μA	V _{CB} = 30V
Collector-emitter cutoff current	I _{CE0}	-	-	0.1	μA	V _{CE} = 30V
Emitter-base cutoff current	I _{EB0}	-	-	0.1	μA	V _{EB} = 5V
Collector-emitter saturation voltage	V _{CE(sat)1}	-	-	0.2	V	I _c /I _b = 10mA/ 0.5mA
	V _{CE(sat)2}	-	-	0.6	V	I _c /I _b = 100mA/ 5mA
Base-emitter voltage	V _{BE(on)}	0.56	-	0.66	V	V _{CE} = 5V, I _c = 1mA
DC current transfer ratio	h _{FE}	250	-	-	-	V _{CE} = 5V, I _c = 0.01mA
		250	-	-	-	V _{CE} = 5V, I _c = 0.1mA
		250	-	650	-	V _{CE} = 5V, I _c = 1mA
		250	-	-	-	V _{CE} = 5V, I _c = 10mA
Transition frequency	f _r	100	-	700	MHz	V _{CE} = 5V, I _c = 1mA, f=100MHz
Collector output capacitance	C _{ob}	-	-	3.0	pF	V _{CB} = 10V, I _E = 0A, f=1MHz

Appendix

Notes

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