

# NPN small signal transistor

## MMST6428

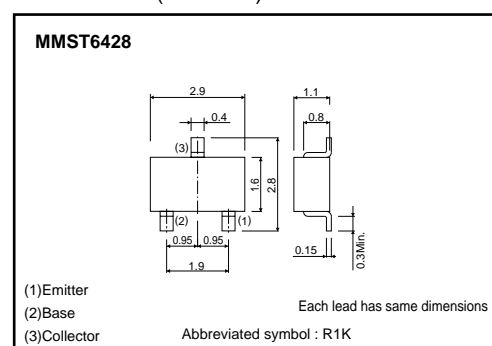
### ●Features

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	$I_c = 1\text{mA}$
Emitter-base breakdown voltage	$BV_{CBO}$	60	-	-	V	$I_c = 100\mu\text{A}$
Collector-base cutoff current	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	$V_{CB} = 30\text{V}$
Collector-emitter cutoff current	$I_{CEO}$	-	-	0.1	$\mu\text{A}$	$V_{CE} = 30\text{V}$
Emitter-base cutoff current	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	$V_{EB} = 5\text{V}$
Collector-emitter saturation voltage	$V_{CE(sat)1}$	-	-	0.2	V	$I_c/I_B = 10\text{mA}/0.5\text{mA}$
	$V_{CE(sat)2}$	-	-	0.6	V	$I_c/I_B = 100\text{mA}/5\text{mA}$
Base-emitter voltage	$V_{BE(on)}$	0.56	-	0.66	V	$V_{CE} = 5\text{V}, I_c = 1\text{mA}$
DC current transfer ratio	$h_{FE}$	250	-	-	-	$V_{CE} = 5\text{V}, I_c = 0.01\text{mA}$
		250	-	-	-	$V_{CE} = 5\text{V}, I_c = 0.1\text{mA}$
		250	-	650	-	$V_{CE} = 5\text{V}, I_c = 1\text{mA}$
		250	-	-	-	$V_{CE} = 5\text{V}, I_c = 10\text{mA}$
Transition frequency	$f_T$	100	-	700	MHz	$V_{CE} = 5\text{V}, I_c = 1\text{mA}, f = 100\text{MHz}$
Collector output capacitance	$C_{ob}$	-	-	3.0	pF	$V_{CB} = 10\text{V}, I_E = 0\text{A}, f = 1\text{MHz}$

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