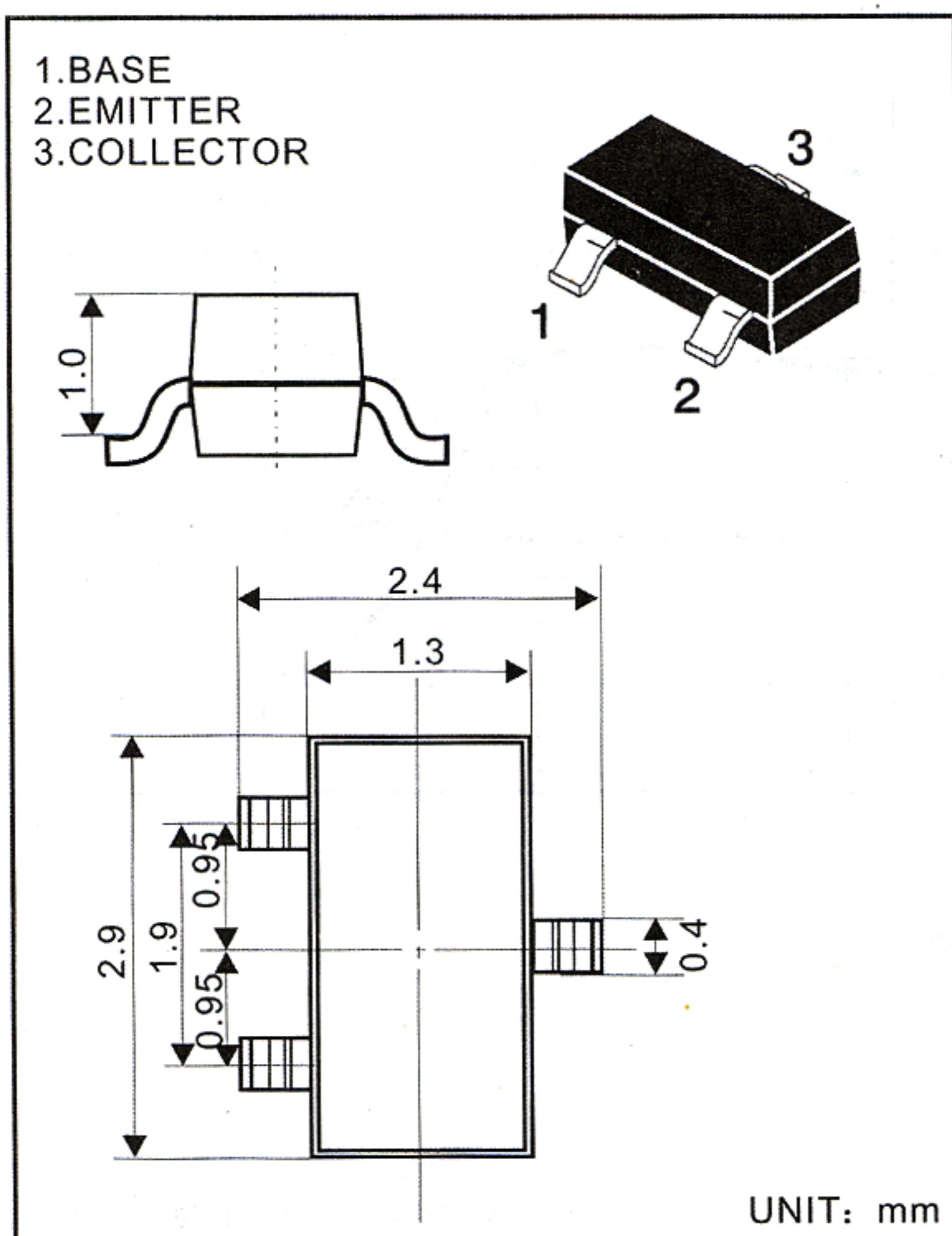


## MMBTA42LT1 TRANSISTOR (NPN)



### FEATURES

#### Power dissipation

$P_{CM}$ : 0.3 W ( $T_{amb}=25^{\circ}C$ )

#### Collector current

$I_{CM}$ : 0.3 A

#### Collector-base voltage

$V_{(BR)CBO}$ : 300V

#### Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$

### ELECTRICAL CHARACTERISTICS

( $T_{amp}=25^{\circ}C$  unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	300		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	300		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_B=0$	5		V
Collector cut-off current	$I_{CBO}$	$V_{CB}=200V, I_E=0$		0.25	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=3V, I_C=0mA$		0.25	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE}=10V, I_C=1mA$	25		
	$h_{FE(2)}$	$V_{CE}=10V, I_C=10mA$	100	200	
	$h_{FE(3)}$	$V_{CE}=10V, I_C=50mA$	25		
Collector-emitter saturation voltage	$V_{CEsat}$	$I_C=20mA, I_B=2mA$		0.5	V
Base-emitter saturation voltage	$V_{BEsat}$	$I_C=20mA, I_B=2mA$		0.9	V
Transition frequency	$f_T$	$V_{CE}=5V, I_C=10mA, f=30MHz$	50		MHz

DEVICE MARKING : MMBTA42LT1=1D

