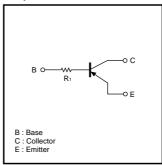
# Digital transistors (built-in resistor) DTA143TM / DTA143TE / DTA143TUA DTA143TKA / DTA143TSA

#### Features

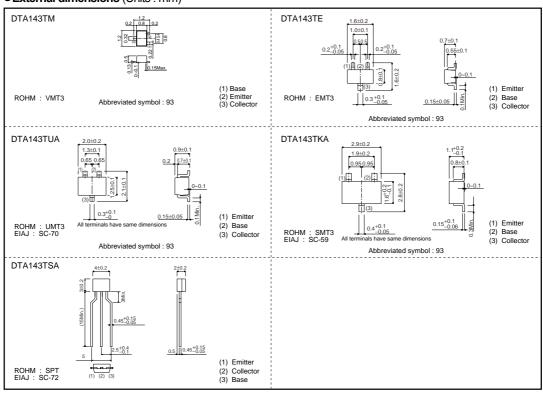
- 1) Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors (see equivalent circuit).
- 2) The bias resistors consist of thin-film resistors with complete isolation to allow positive biasing of the input. They also have the advantage of almost completely eliminating parasitic effects.
- 3) Only the on/off conditions need to be set for operation, making device design easy.

#### •Equivalent circuit



#### Structure

PNP digital transistor (Built in resistor type)



#### • External dimensions (Units : mm)

# DTA143TM / DTA143TE / DTA143TUA DTA143TKA / DTA143TSA

## Transistors

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

Parameter	Symbol	Limi	Unit		
		M E	UA KA	SA	
Collector-base voltage	Vсво		V		
Collector-emitter voltage	Vceo		V		
Emitter-base voltage	Vево		V		
Collector current	lc		mA		
Collector power dissipation	Pc	150	200	300	mW
Junction temperature	Tj		°C		
Storage temperature	Tstg		°C		

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

	,						
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions	
Collector-base breakdown voltage	ВУсво	-50	-	-	V	Ic=-50μA	
Collector-emitter breakdown voltage	BVCEO	-50	-	-	V	Ic=-1mA	
Emitter-base breakdown voltage	ВVево	-5	-	-	V	Iε=-50μA	
Collector cutoff current	Ісво	-	-	-0.5	μΑ	Vcb=-50V	
Emitter cutoff current	Іево	-	-	-0.5	μΑ	VEB=-4V	
Collector-emitter saturation voltage	VCE(sat)	-	-	-0.3	V	Ic/IB=-5mA/-0.25mA	
DC current transfer ratio	hfe	100	250	600	-	Ic=-1mA, Vce=-5V	
Input resistance	R1	3.29	4.7	6.11	kΩ	-	
Transition frequency	fт	-	250	-	MHz	Vce=-10V, Ie=5mA, f=100MHz	
- <b>T</b> - <b>M</b>							

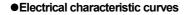
\* Transition frequency of the device

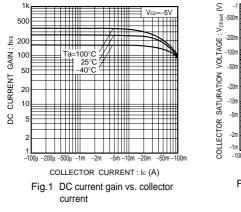
### Packaging specifications

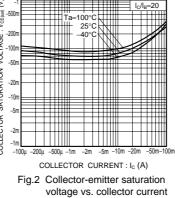
	Package	VMT3	EMT3	UMT3	SMT3	SPT
	Packaging type	Taping	Taping	Taping	Taping	Taping
	Code	T2L	TL	T106	T146	TP
Туре	Basic ordering unit (pieces)	8000	3000	3000	3000	5000
DTA143TM		0	-	-	-	-
DTA143TE		-	0	-	-	-
DTA143TUA	A	-	-	0	-	-
DTA143TKA	A Contraction of the second se	-	-	-	0	-
DTA143TSA	۱	-	-	-	_	0

## DTA143TM / DTA143TE / DTA143TUA DTA143TKA / DTA143TSA

## Transistors







# ROHM

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