



# DTC114TM / DTC114TE / DTC114TUA DTC114TKA / DTC114TSA

## Transistors

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

Parameter	Symbol	Limits(DTA114T□)					Unit
		M	E	UA	KA	SA	
Collector-base voltage	Vcbo	50					V
Collector-emitter voltage	Vceo	50					V
Emitter-base voltage	Vebo	5					V
Collector current	Ic	100					mA
Collector power dissipation	Pc	150	200		300		mW
Junction temperature	Tj	150					°C
Storage temperature	Tstg	-55 to +150					°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BVcbo	50	–	–	V	Ic=50μA
Collector-emitter breakdown voltage	BVceo	50	–	–	V	Ic=1mA
Emitter-base breakdown voltage	BVebo	5	–	–	V	Ie=50μA
Collector cutoff current	Icbo	–	–	0.5	μA	Vcb=50V
Emitter cutoff current	Iebo	–	–	0.5	μA	VEB=4V
Collector-emitter saturation voltage	VCE(sat)	–	–	0.3	V	Ic/Ib=10mA/1mA
DC current transfer ratio	hFE	100	250	600	–	Vce=5V, Ic=1mA
Input resistance	R1	7	10	13	kΩ	–
Transition frequency	fT	–	250	–	MHz	Vce=10V, Ie=-5mA, f=100MHz *

\* Transition frequency of the device

### ●Packaging specifications

Type	Package	VMT3	EMT3	UMT3	SMT3	SPT
	Package type	Taping	Taping	Taping	Taping	Taping
	Code	T2L	TL	T106	T146	TP
	Basic ordering unit (pieces)	8000	3000	3000	3000	5000
DTC114TM	○	–	–	–	–	–
DTC114TE	–	○	–	–	–	–
DTC114TUA	–	–	○	–	–	–
DTC114TKA	–	–	–	○	–	–
DTC114TSA	–	–	–	–	–	○

Transistors

●Electrical characteristic curves

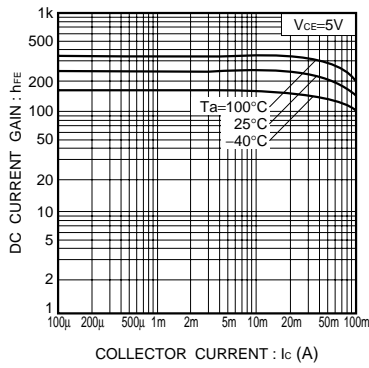


Fig.1 DC current gain vs. collector current

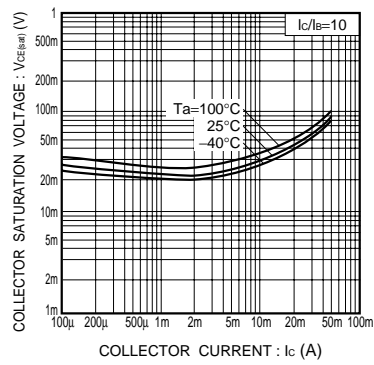


Fig.2 Collector-emitter saturation voltage vs. collector current

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