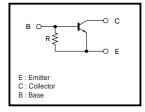
# Digital transistors (built-in resistor) DTC115GUA/DTC115GKA/DTC115GSA

#### Features

- The built-in bias resistors consist of thin-film resistors with complete isolation to allow positive biasing of the input, and parasitic effects are almost completely eliminated.
- Only the on / off conditions need to be set for operation, making device design easy.
- 3) Higher mounting densities can be achieved.

#### Equivalent circuit



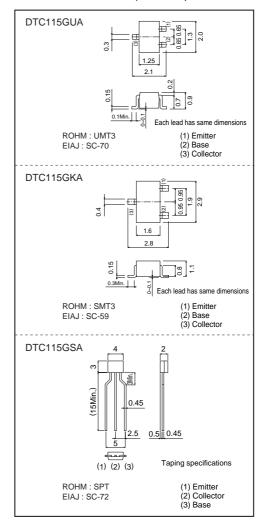
#### Absolute maximum ratings (Ta=25°C)

Parameter		Symbol	Limits	Unit
Collector-base voltage		Vсво	50	V
Collector-emitter voltag		Vceo	50	V
Emitter-base voltage		Vebo	5	V
Collector current		lc	100	mA
Collector power dissipation	DTA115GUA / DTA115GKA	Pc	200	mW
	DTA115GSA	PC	300	mW
Junction temperature		Tj	150	°C
Storage temperature		Tstg	-55 to +150	°C

#### Package, marking, and packaging specifications

Туре	DTC115GUA	DTC115GKA	DTC115GSA	
Package	UMT3	SMT3	SPT	
Marking	K29	K29	-	
Packaging code	T106	T146	TP	
Basic ordering unit (pieces)	3000	3000	5000	

#### •External dimensions (Unit : mm)



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

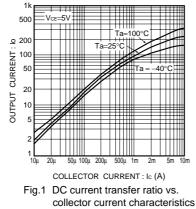
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions	
Collector-base breakdown voltage	ВУсво	50	-	-	V	Ic=50μA	
Collector-emitter breakdown voltag	BVCEO	50	-	-	V	Ic=1mA	
Emitter-base breakdown voltage	ВVево	5	-	-	V	Iε=72μA	
Collector cutoff current	Ісво	-	-	0.5	μΑ	Vcb=50V	
Emitter cutoff current	Іево	30	-	58	μΑ	VEB=4V	
Collector-emitter saturation voltage	VCE(sat)	-	-	0.3	V	Ic=5mA, Is=0.25mA	
DC current transfer ratio	hfe	82	-	-	-	Ic=5mA, VcE=5V	
Emitter-base resistance	R	70	100	130	kΩ	-	
Transition frequency	fr	-	250	-	MHz	Vce=10V, Ie=-5mA, f=100MHz	*

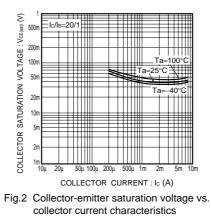


## DTC115GUA / DTC115GKA / DTC115GSA

### Transistors

#### •Electrical characteristics curves





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