



# DTA115EM / DTA115EE / DTA115EUA DTA115EKA / DTA115ESA

## Transistors

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

Parameter		Symbol	Limits	Unit
Supply voltage		V <sub>CC</sub>	-50	V
Input voltage		V <sub>I</sub>	-40 to +10	V
Output current		I <sub>O</sub>	-20	mA
		I <sub>C(Max.)</sub>	-100	
Power dissipation	DTA115EM / DTA115EE	P <sub>d</sub>	150	mW
	DTA115EUA / DTA115EKA		200	
	DTA115ESA		300	
Junction temperature		T <sub>j</sub>	150	°C
Storage temperature		T <sub>stg</sub>	-55 to +150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V <sub>I(off)</sub>	-	-	-0.5	V	V <sub>CC</sub> = -5V, I <sub>O</sub> = -100μA
	V <sub>I(on)</sub>	-3	-	-		V <sub>O</sub> = -0.3V, I <sub>O</sub> = -1mA
Output voltage	V <sub>O(on)</sub>	-	-0.1	-0.3	V	I <sub>O</sub> = -5mA, I <sub>I</sub> = -0.25mA
Input current	I <sub>I</sub>	-	-	-0.15	mA	V <sub>I</sub> = -5V
Output current	I <sub>O(off)</sub>	-	-	-0.5	μA	V <sub>CC</sub> = -50V, V <sub>I</sub> =0V
DC current gain	G <sub>I</sub>	82	-	-	-	I <sub>O</sub> = -5mA, V <sub>O</sub> = -5V
Input resistance	R <sub>I</sub>	70	100	130	kΩ	-
Resistance ratio	R <sub>2</sub> /R <sub>1</sub>	0.8	1	1.2	-	-
Transition frequency	f <sub>T</sub>	-	250	-	MHz	V <sub>CE</sub> = -10V, I <sub>E</sub> =5mA, f=100MHz *

\*Transition frequency of the device.

### ●Package, marking, and packaging specifications

Type	DTA115EM	DTA115EE	DTA115EUA	DTA115EKA	DTA115ESA
Package	VMT3	EMT3	UMT3	SMT3	SPT
Marking	19	19	19	19	-
Packaging code	T2L	TL	T106	T146	TP
Basic ordering unit (pieces)	8000	3000	3000	3000	5000

Transistors

●Electrical characteristics curves

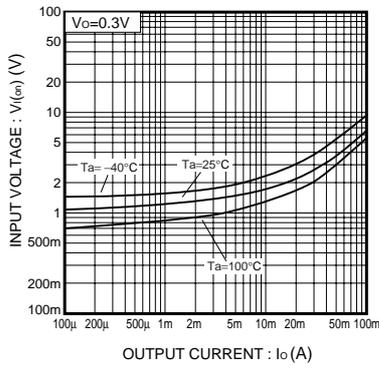


Fig.1 Input voltage vs. Output current (ON characteristics)

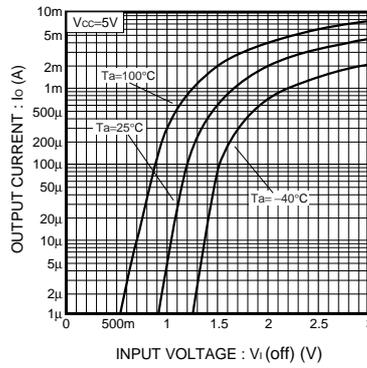


Fig.2 Output current vs. Input voltage (OFF characteristics)

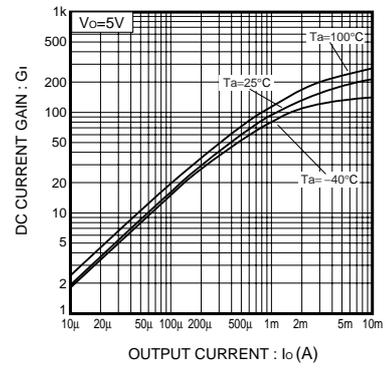


Fig.3 DC current gain vs. Output current

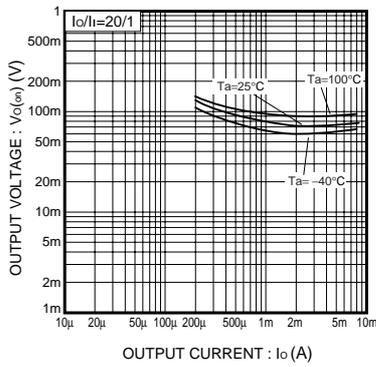


Fig.4 Output voltage vs. Output current

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