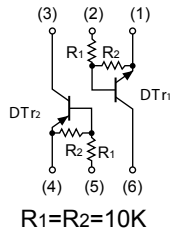
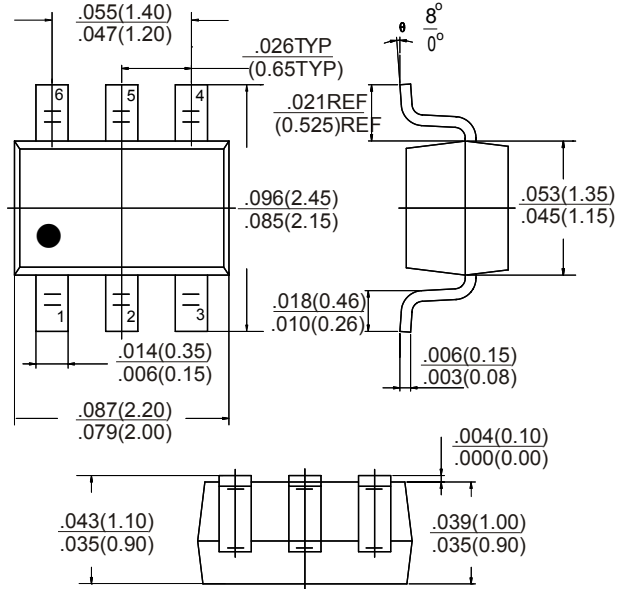


Features

- * DTA114E and DTC114E transistors are built-in a SOT-363 package.
- * Transistor elements are independent, eliminating interference.
- * Mounting cost and area can be cut in half.



SOT-363



Dimensions in inches and (millimeters)

MARKING:D3

Electrical Characteristics(Tamb=25°C unless otherwise specified)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	50	V
Input voltage	V _{IN}	-10~40	V
Output current	I _O	50	mA
	I _{C(MAX)}	100	
Power dissipation	Pd	150(TOTAL)	mW
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-55~150	°C

Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Input voltage	V _{I(off)}			0.5	V	V _{CC} =5V, I _O =100 μA
	V _{I(on)}	3				V _O =0.3V, I _O =10mA
Output voltage	V _{O(on)}			0.3	V	I _O /I _I =10mA/0.5mA
Input current	I _I			0.88	mA	V _I =5V
Output current	I _{O(off)}			0.5	μA	V _{CC} =50V, V _I =0
DC current gain	G _I	30				V _O =5V, I _O =5mA
Input resistance	R ₁	7	10	13	KΩ	
Resistance ratio	R ₂ /R ₁	0.8	1	1.2		
Transition frequency	f _T		250		MHz	V _{CE} =10V, I _E =-5mA, f=100MHz

DTr1 (NPN)

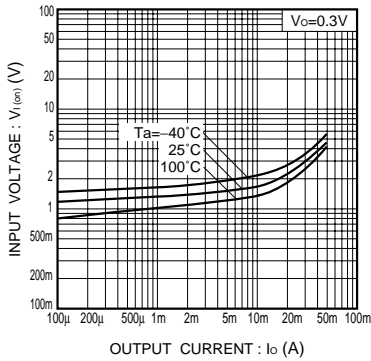


Fig.1 Input voltage vs. output current (ON characteristics)

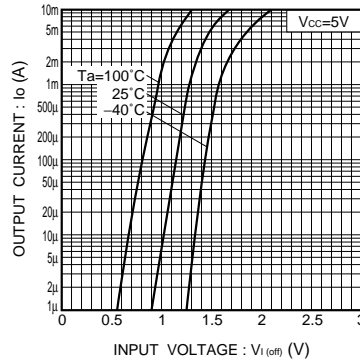


Fig.2 Output current vs. input voltage (OFF characteristics)

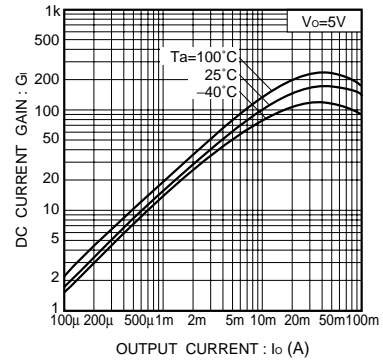


Fig.3 DC current gain vs. output current

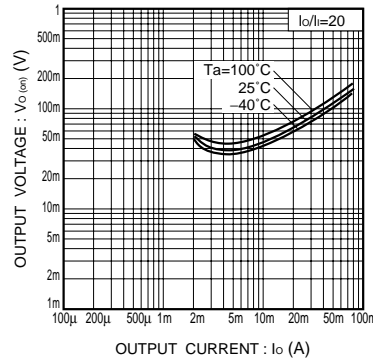


Fig.4 Output voltage vs. output current

DTr2 (PNP)

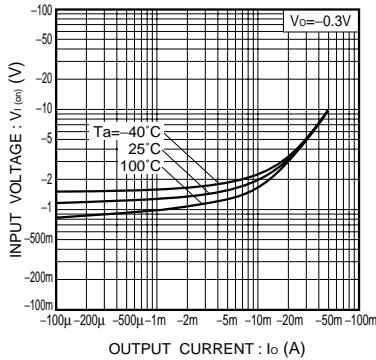


Fig.5 Input voltage vs. output current (ON characteristics)

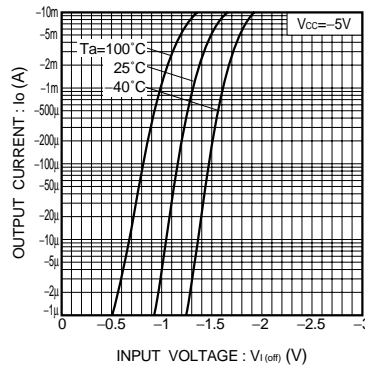


Fig.6 Output current vs. input voltage (OFF characteristics)

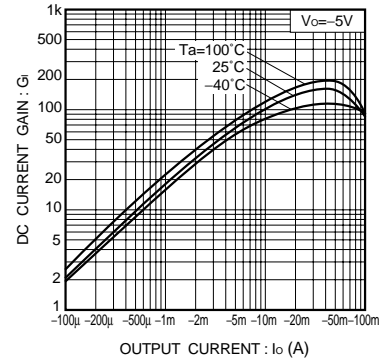


Fig.7 DC current gain vs. output current

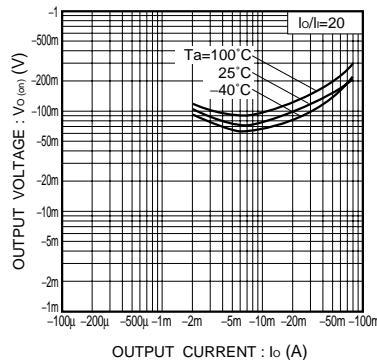


Fig.8 Output voltage vs. output current