



DTPP114E

PNP SILICON TRANSISTOR

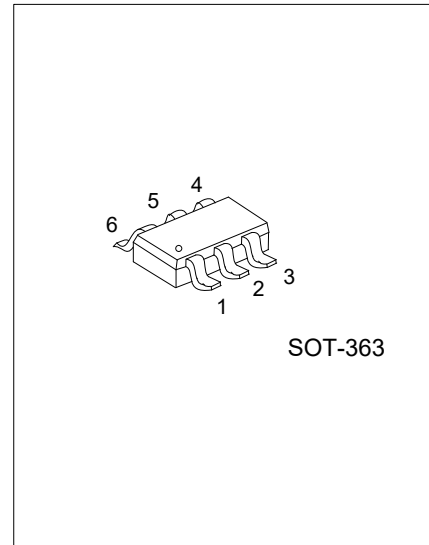
DIGITAL TRANSISTORS (BUILT-IN BIAS RESISTORS)

DESCRIPTION

The UTC **DTPP114E** is a PNP epitaxial transistor; it uses UTC's advanced technology to provide the customers with low collector-emitter saturation voltage, etc.

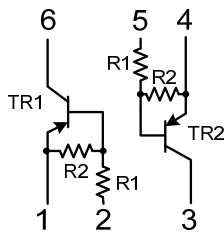
FEATURES

- * Two DTA114E chips in a SOT-363 package
- * Low collector-emitter saturation voltage
- * With built-in bias resistors
- * Simplify circuit design
- * Silicon epitaxial type
- * The internal two transistor elements are independent



SOT-363

EQUIVALENT CIRCUIT



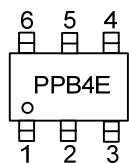
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
DTPP114EL-AL6-R	DTPP114EG-AL6-R	SOT-363	G1	I1	O2	G2	I2	O1	Tape Reel

Note: Pin Assignment: G: GND I: Input O: Output

DTPP114EG-AL6-R	(1)Packing Type	(1) R: Tape Reel
	(2)Package Type	(2) AL6: SOT-363
	(3)Green Package	(3) G: Halogen Free and Lead Free, L: Lead Free

MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified.)

PARAMETER		SYMBOL	RATINGS	UNIT
Supply Voltage		V _{CC}	-50	V
Input Voltage		V _{IN}	-40 ~ +10	V
Output Current		I _{OUT(MAX)}	-100	mA
Power Dissipation	SOT-23/SOT-323	P _D	200	mW
	SOT-523		150	mW
	SOT-723		100	mW
	TO-92		625	mW
	TO-92SP		550	mW
Junction Temperature		T _J	+150	°C
Storage Temperature		T _{STG}	-55 ~ +150	°C

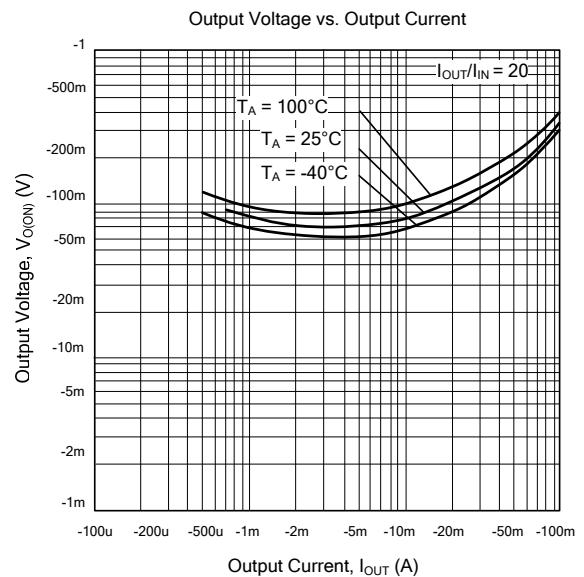
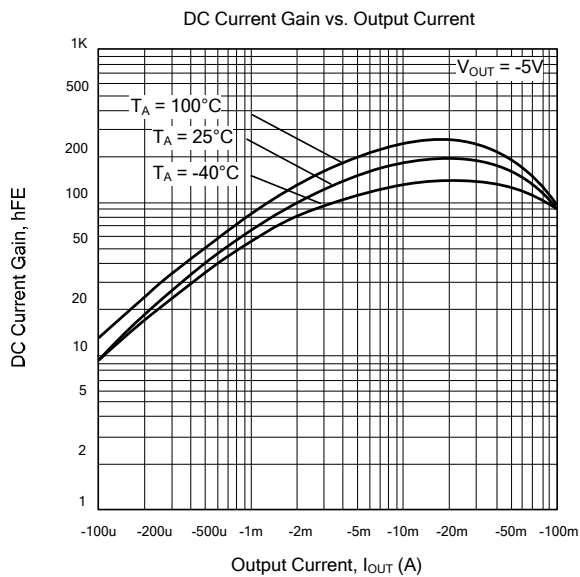
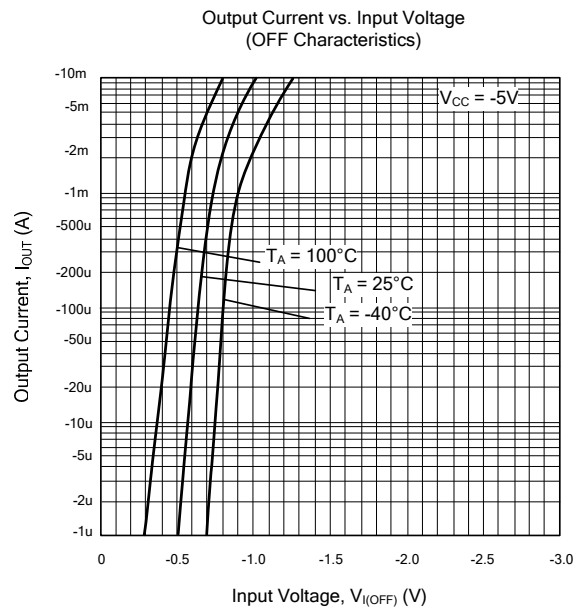
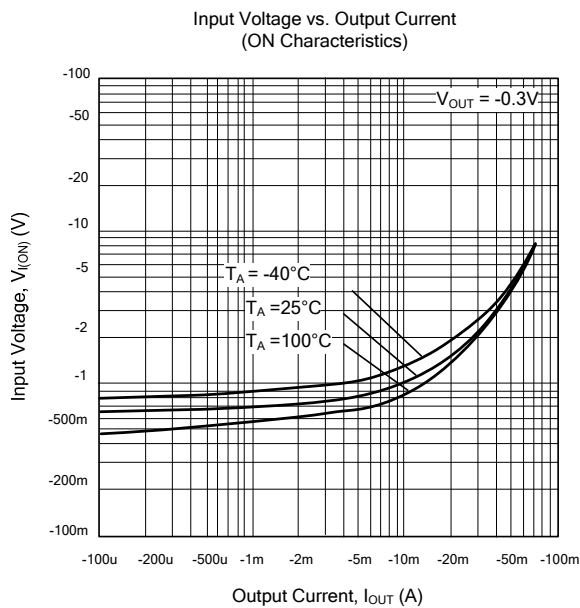
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
OFF CHARACTERISTICS						
Input Voltage	V _{IN(OFF)}	V _{CC} = -5V, I _{OUT} = -100μA			-0.5	V
	V _{IN(ON)}	V _{OUT} = -0.3V, I _{OUT} = -10mA	-3.0			
Output Voltage	V _{OUT(ON)}	I _{OUT} /I _{IN} = -10mA/-0.5mA			-0.3	V
Input Current	I _{IN}	V _{IN} = -5V			-0.88	mA
Output Current	I _{OUT(OFF)}	V _{CC} = -50V, V _{IN} =0V			-0.5	μA
ON CHARACTERISTICS						
DC Current Gain	h _{FE}	V _{OUT} = -5V, I _{OUT} = -5mA	30			
SMALL SIGNAL CHARACTERISTICS						
Input Resistance	R ₁		7	10	13	kΩ
Resistance Ratio	R ₂ /R ₁		0.8	1.0	1.2	
Transition Frequency	f _T	V _{CE} = -10 V, I _E =5mA, f=100MHz		250		MHz

Note: Transition frequency of the device.

TYPICAL CHARACTERISTICS



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