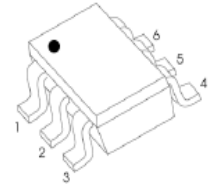
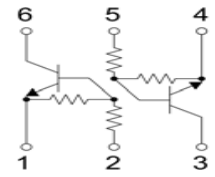




### UMH9N Dual Digital Transistors (NPN+NPN)

#### FEATURES

- Two DTC114Y chips in a package
- Transistor elements are independent, eliminating interference
- Mounting cost and area can be cut in half



**SOT-363**

Absolute maximum ratings(Ta=25°C)

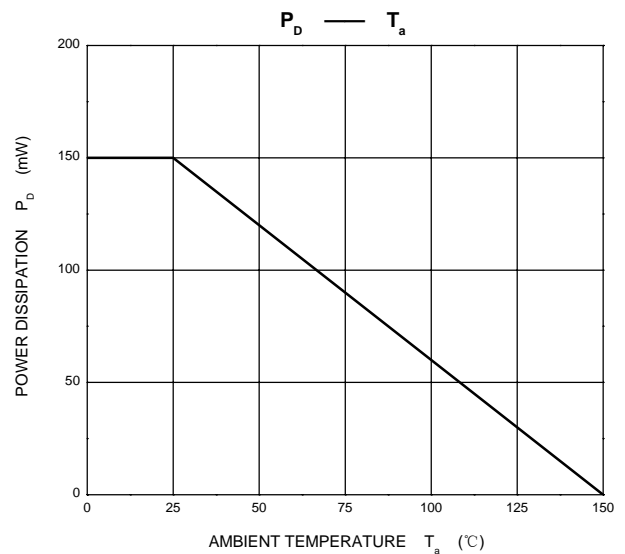
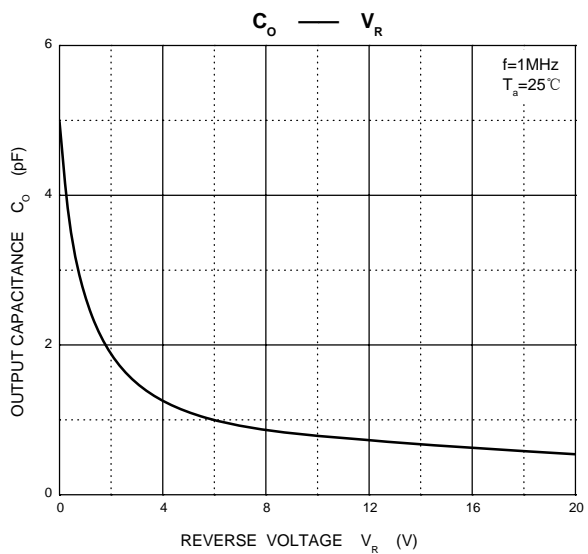
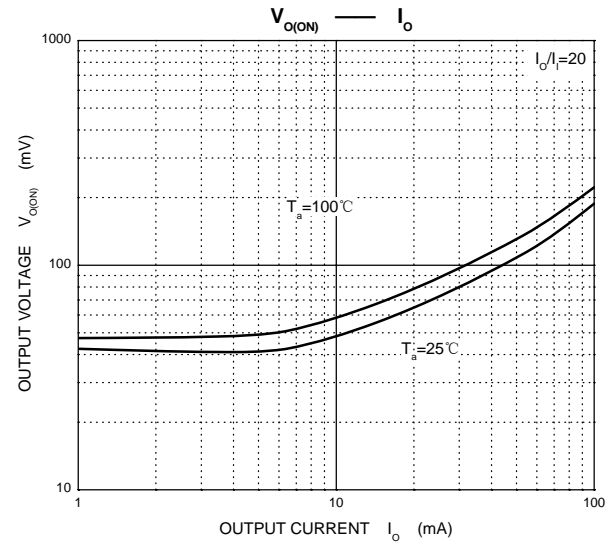
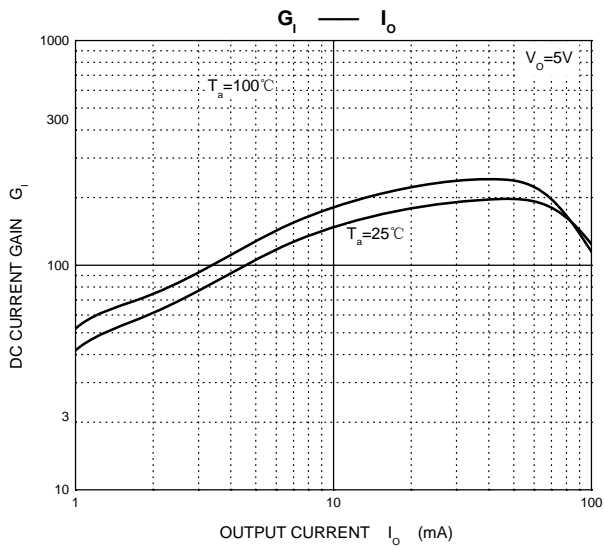
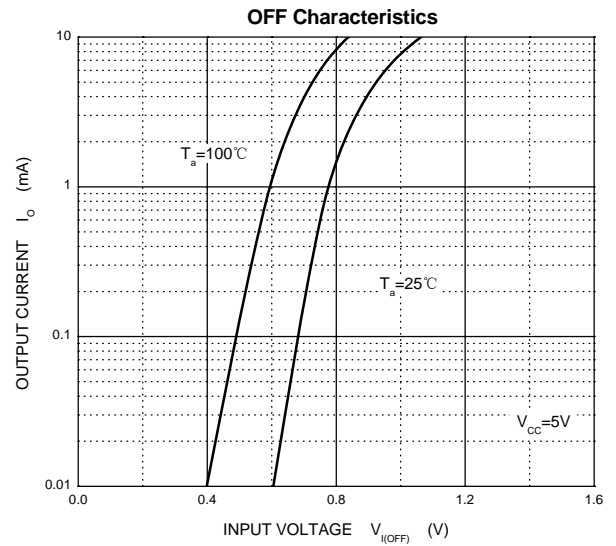
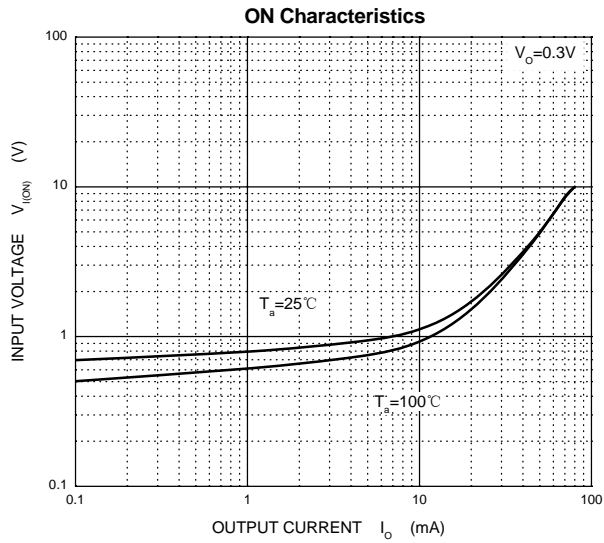
Parameter	Symbol	Value	Unit
Supply voltage	$V_{CC}$	50	V
Input voltage	$V_{IN}$	-6~40	V
Output current	$I_o$	70	mA
	$I_{C(MAX)}$	100	
Power dissipation	$P_d$	150(TOTAL)	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55~150	°C

Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	0.3			V	$V_{CC}=5V, I_o=100\mu A$
	$V_{I(on)}$			1.4		$V_o=0.3V, I_o=1mA$
Output voltage	$V_{O(on)}$			0.3	V	$I_o/I_i=5mA/0.25mA$
Input current	$I_i$			0.88	mA	$V_i=5V$
Output current	$I_{O(off)}$			0.5	$\mu A$	$V_{CC}=50V, V_i=0$
DC current gain	$G_1$	68				$V_o=5V, I_o=5mA$
Input resistance	$R_1$	7	10	13	K $\Omega$	
Resistance ratio	$R_2/R_1$	3.7	4.7	5.7		
Transition frequency	$f_T$		250		MHz	$V_{CE}=10V, I_E=-5mA, f=100MHz$

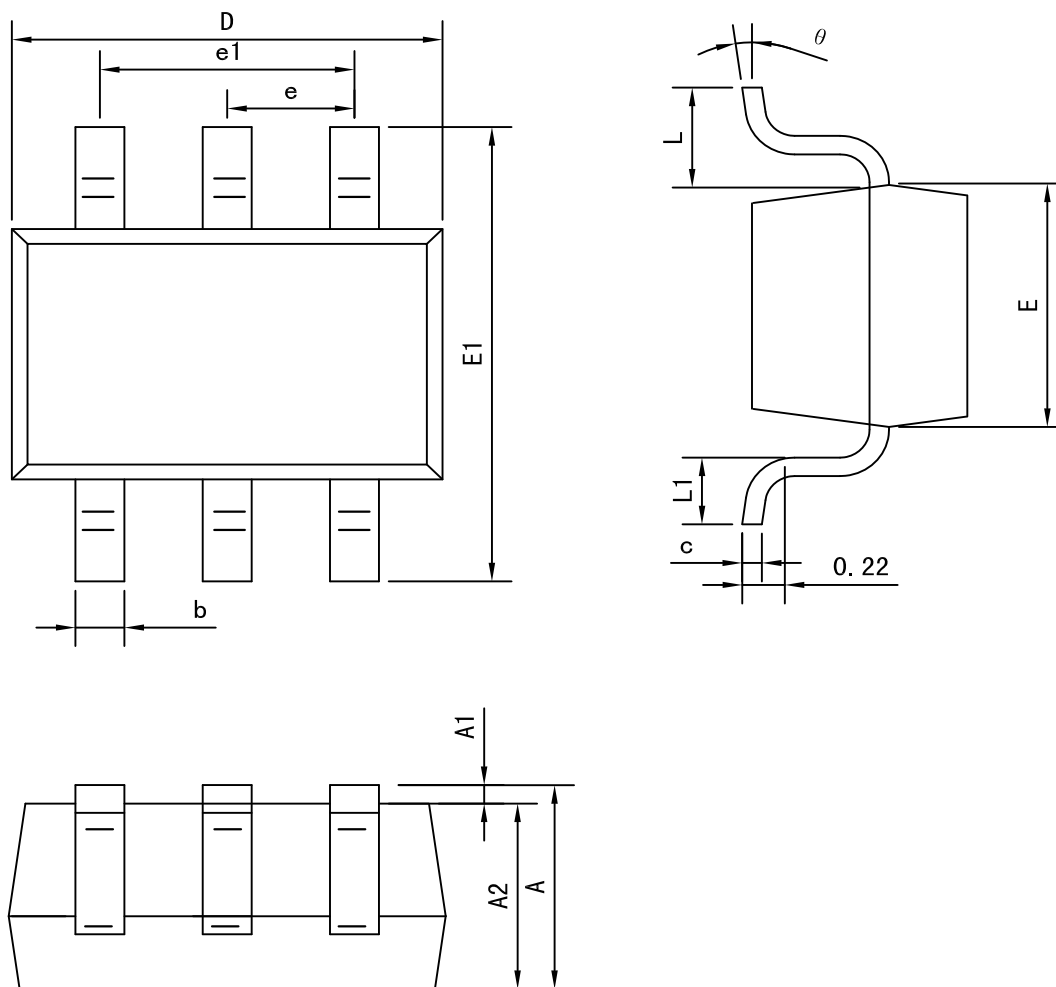


## Typical Characteristics





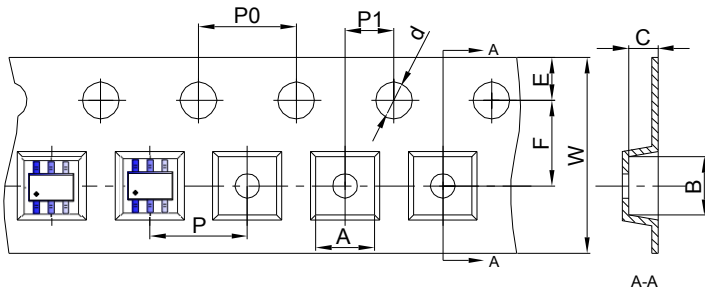
## SOT-363 Package outline dimensions



Symbol	Dimension in Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP	
e1	1.200	1.400
L	0.525 REF	
L1	0.260	0.460
$\theta$	0°	8°



### SOT-363 Embossed Carrier Tape



#### Packaging Description:

SOT-363 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-363	2.25	2.55	1.20	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

### SOT-363 Tape Leader and Trailer

