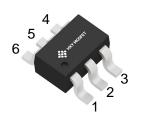
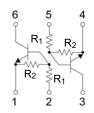


#### **Features**

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



SOT-363



## **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
UMH9NTN	SOT-363	H9	3000

Maxmim Ratings (Ta=25 unless otherwise noted)

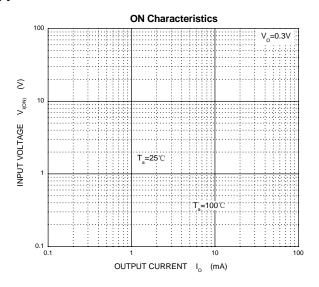
maximin ratings (ra 20 amoss otherwise notea)					
Symbol	Parameter	Limits	Unit		
Vcc	Supply Voltage	50	V		
V <sub>IN</sub>	Input Voltage	-6 ∼+40	V		
lo	Output Current	70	mA		
I <sub>CM</sub>	Peak Collector Current	100	mA		
P <sub>D</sub>	Power Dissipation	150	mW		
T <sub>J</sub> ,T <sub>stg</sub>	Operation Junction and Storage Temperature Range	-55∼+150	°C		

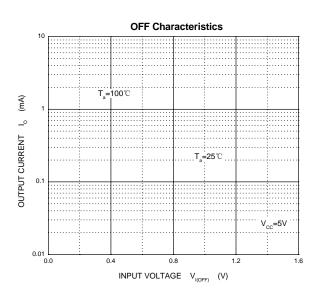
## Electrcal Charcteristics (Ta=25 unless otherwise specified)

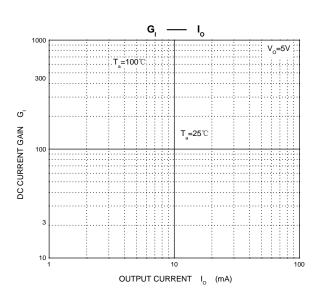
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Input voltage	$V_{I(off)}$	V <sub>CC</sub> =5V,I <sub>O</sub> =100μA	0.3			V
	$V_{I(on)}$	V <sub>O</sub> =0.3V,I <sub>O</sub> =1mA			1.2	V
Output voltage	V <sub>O(on)</sub>	I <sub>O</sub> /I <sub>I</sub> =5mA/0.25mA			0.3	V
Input current	l <sub>l</sub>	V <sub>I</sub> =5V			0.88	mA
Output current	I <sub>O(off)</sub>	V <sub>CC</sub> =50V,V <sub>I</sub> =0			0.5	μΑ
DC current gain	Gı	V <sub>O</sub> =5V,I <sub>O</sub> =5mA	68			
Input resistance	R <sub>1</sub>		7	10	13	kΩ
Resistance ratio	R <sub>2</sub> /R <sub>1</sub>		3.7	4.7	5.7	
Transition frequency	f <sub>T</sub>	V <sub>O</sub> =10V,I <sub>O</sub> =-5mA,f=100MHz		250		MHz

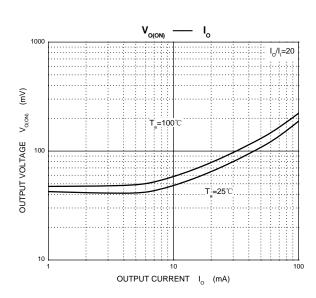


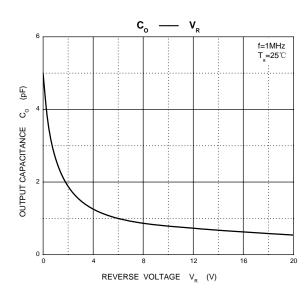
### **Typical Electrical**

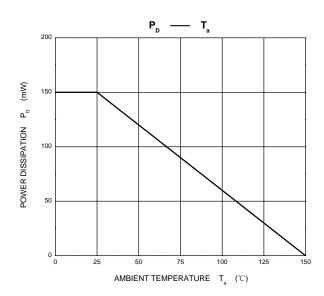






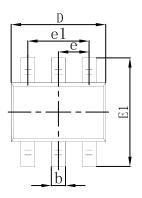


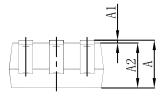


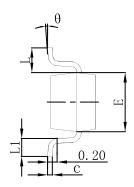




# **SOT-363 Package Outline Dimensions**







Symbol	Dimensions In Millimeters		Dimensions In Inches		
	Min	Max	Min	Max	
Α	0.900	1.100	0.035	0.043	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.000	0.035	0.039	
b	0.150	0.350	0.006	0.014	
С	0.100	0.150	0.004	0.006	
D	2.000	2.200	0.079	0.087	
E	1.150	1.350	0.045	0.053	
E1	2.150	2.400	0.085	0.094	
е	0.650	) TYP	0.026 TYP		
e1	1.200	1.400	0.047	0.055	
L	0.525 REF		0.021 REF		
L1	0.260	0.460	0.010	0.018	
θ	0°	8°	0°	8°	



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