

Small Signal Product

**DUAL Digital Transistor(NPN+NPN)**

FEATURES

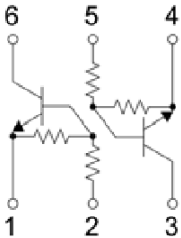
- Epitaxial planar die construction
- Surface device type mounting
- Two DTC114E chip in a package
- Transistor elements are independent, eliminating interference
- Mounting cost and area be cut in half
- Pb free version and RoHS compliant
- Packing code with suffix "G" means green compound (halogen-free)



**SOT-363**

MECHANICAL DATA

- Case: SOT-363 small outline plastic package
- Moisture sensitivity level 1
- Terminal: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- Weight: 7.1 ± 0.5 mg
- Marking Code: H11



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Supply voltage	V <sub>CC</sub>	50	V
Input voltage	V <sub>IN</sub>	-10~40	V
Output current	I <sub>O</sub>	50	mA
	I <sub>C(max)</sub>	100	mA
Power dissipation	P <sub>d</sub>	150	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	- 55 to +150	°C

PARAMETER		SYMBOL	MIN	TYP	MAX	UNIT
Input voltage	V <sub>CC</sub> =5V, I <sub>O</sub> =100uA	V <sub>I(off)</sub>			0.5	V
	V <sub>O</sub> =0.3V, I <sub>O</sub> =10mA	V <sub>I(on)</sub>	3			V
Output voltage	I <sub>O</sub> /I <sub>I</sub> =10mA/0.5mA	V <sub>O(on)</sub>		0.1	0.3	V
Input current	V <sub>I</sub> =5V	I <sub>I</sub>			0.88	mA
Onput current	V <sub>CC</sub> =50V, V <sub>I</sub> =0	I <sub>O(off)</sub>			0.5	uA
DC current gain	V <sub>O</sub> =5V, I <sub>O</sub> =5mA	G <sub>I</sub>	30			
Input resistance	-	R <sub>1</sub>	7	10	13	KΩ
Resistance ratio	-	R <sub>2</sub> /R <sub>1</sub>	0.8	1	1.2	
Transition frequency	V <sub>CE</sub> =10V, I <sub>E</sub> =5mA, f=100MHz	f <sub>T</sub>		250		MHz

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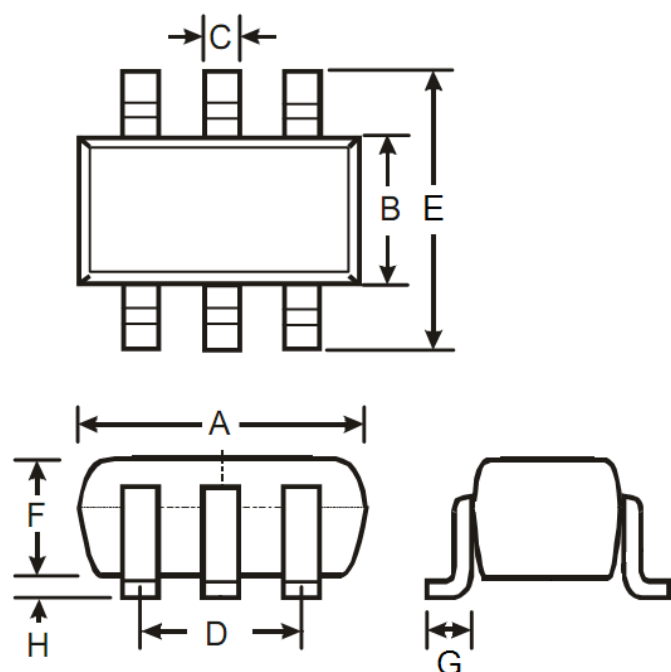
ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
UMH11N (Note 1)	RE	G	SOT-363	3K / 7" Reel

Note 1: Whole series with green compound

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
UMH11N REG	UMH11N	RE	G	Green compound

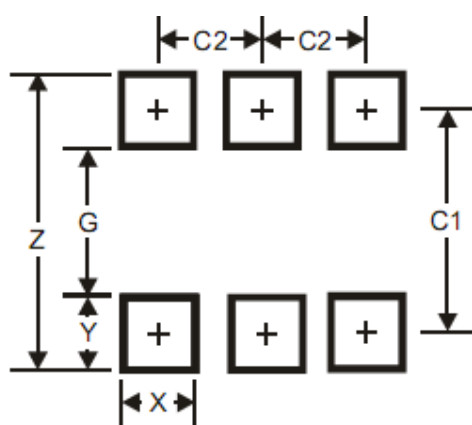
DIMENSIONS

**SOT-363**



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.00	2.20	0.079	0.087
B	1.15	1.35	0.045	0.053
C	0.15	0.35	0.006	0.014
D	1.20	1.40	0.047	0.055
E	2.15	2.45	0.085	0.096
F	0.85	1.05	0.033	0.041
G	0.25	0.46	0.010	0.018
H	0.00	0.10	0.000	0.004

SUGGESTED PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
Z	2.50	0.098
G	1.30	0.051
X	0.42	0.017
Y	0.60	0.024
C1	1.90	0.075
C2	0.65	0.026

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