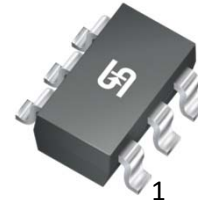


Small Signal Product

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)

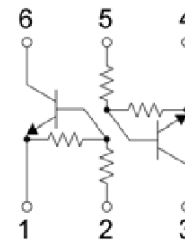


SOT-363



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 ($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Supply voltage	V_{CC}	50	V
Input voltage	V_{IN}	-10~40	V
Output current	I_O	50	mA
	$I_{C(max)}$	100	mA
Power dissipation	P_d	150	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to +150	$^\circ\text{C}$

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Input voltage	$V_{CC}=5V, I_O=100\mu A$	$V_{I(off)}$		0.5	V
	$V_O=0.3V, I_O=10mA$	$V_{I(on)}$	3		V
Output voltage	$I_O/I_I=10mA/0.5mA$	$V_{O(on)}$	0.1	0.3	V
Input current	$V_I=5V$	I_I		0.88	mA
Onput current	$V_{CC}=50V, V_I=0$	$I_{O(off)}$		0.5	μA
DC current gain	$V_O=5V, I_O=5mA$	G_I	30		
Input resistance	-	R_1	7	10	$K\Omega$
Resistance ratio	-	R_2/R_1	0.8	1	
Transition frequency	$V_{CE}=10V, I_E=5mA, f=100MHz$	f_T	250		MHz

Small Signal Product

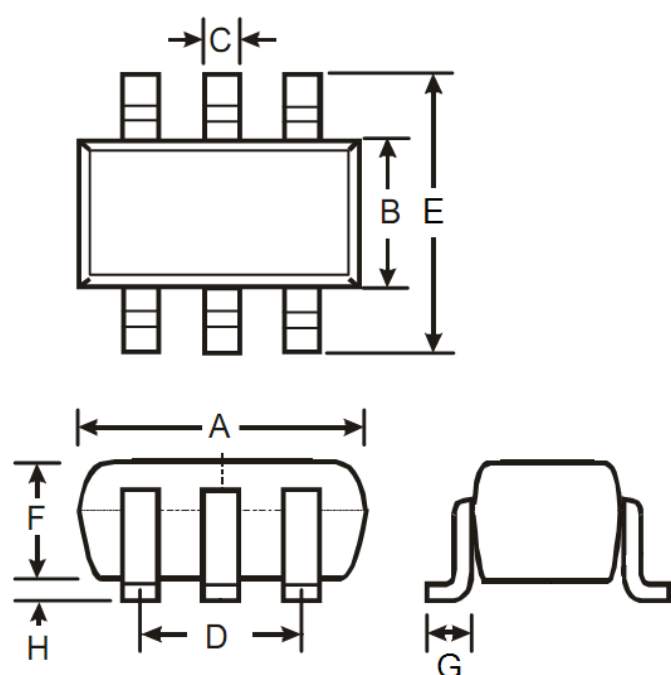
ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
UMH11N (Note 1)	RE	G	SOT-363	3K / 7" Reel

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

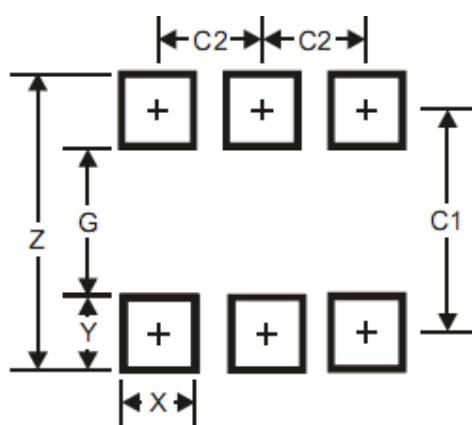
DIMENSIONS

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

Small Signal Product

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