

SOT-363

Features

- ◇ Epitaxial planar die construction
- ◇ Surface device type mounting
- ◇ Moisture sensitivity level 1
- ◇ Pb free version and RoHS compliant
- ◇ Two DTC114E chip in a package
- ◇ Mounting possible with SOT-363 automatic mounting machines
- ◇ Transistor elements are independent, eliminating interference
- ◇ Mounting cost and area be cut in half

Mechanical Data

- ◇ Case : SOT- 363 small outline plastic package
- ◇ Lead : Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ◇ Weight : 7.1 mgram (approximately)
- ◇ Marking Code : H11

Ordering Information

Part No.	Package	Packing	Packing code	Packing code (Green)	Manufacture code
UMH11N	SOT-363	3K / 7" Reel	RE	REG	M0

Note : Detail please see "Ordering Information(detail, example)" below.

Maximum Ratings and Electrical Characteristics

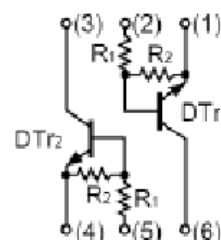
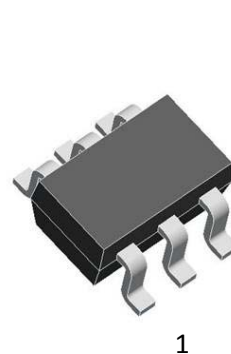
Rating at 25°C ambient temperature unless otherwise specified.

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)

Parameter	Symbol	Value	Units
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	$^\circ\text{C}$

Characteristics at $T_A=25^\circ\text{C}$

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Units
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	13	K Ω
Resistance ratio	-	R_2/R_1	0.8	1	1.2	
Transition frequency	$V_{CE}=10V, I_E=5mA, f=100MHz$	f_T		250		MHz



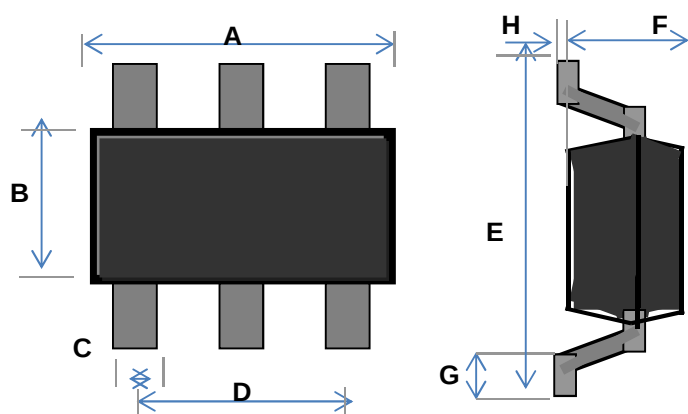
Small Signal Product

Ordering information (Detail, example)

Part No.	Package	Packing	Packing code	Packing code (Green)	Manufacture code
UMH11N	SOT-363	3K / 7" REEL	RE	REG	(Note)
UMH11N	SOT-363	3K / 7" REEL	RE	REG	
UMH11N	SOT-363	3K / 7" REEL	RE	REG	M0

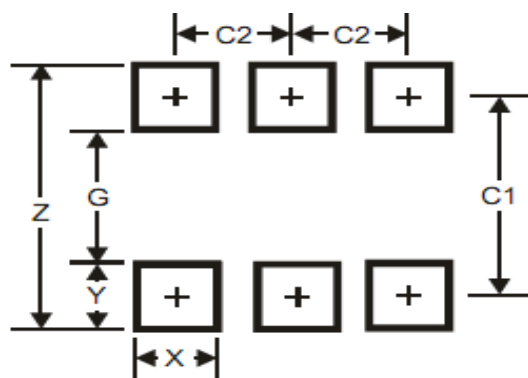
Note : Manufacture special control, if empty means no special control requirement.

Dimensions



Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.000	2.200	0.079	0.087
B	1.150	1.350	0.045	0.053
C	0.150	0.350	0.006	0.014
D	1.200	1.400	0.047	0.055
E	2.150	2.450	0.085	0.096
F	0.850	1.050	0.033	0.041
G	0.250	0.460	0.010	0.018
H	0.000	0.100	0.000	0.004

Suggest pad layout



Symbol	Unit (mm)
Z	2.50
G	1.30
X	0.42
Y	0.60
C1	1.90
C2	0.65