

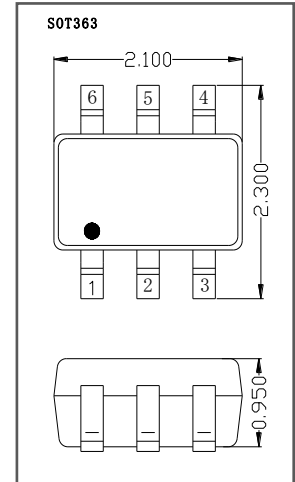
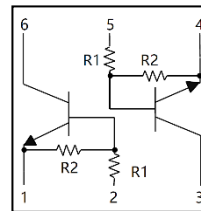
DATA SHEET

UMH11N

- ◇Epoxy Meets UL 94 V-0 Flammability Rating
- ◇Lead Free Finish/RoHS Compliant
- ◇Transistor Elements Independent, Eliminating Interference
- ◇Rugged And Reliable

Device Marking Code	
UMH11N	H11

Equivalent Circuit



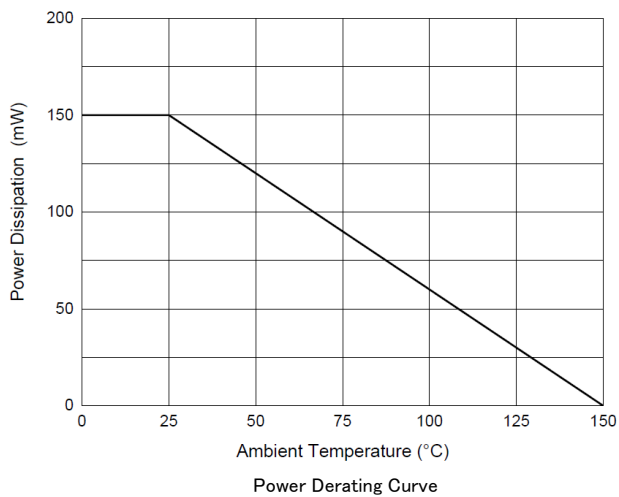
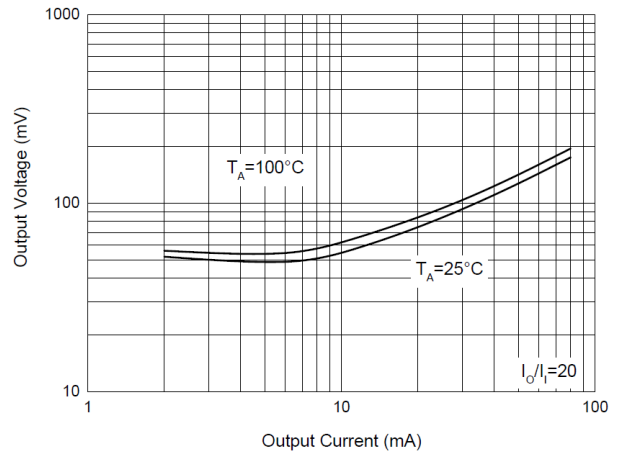
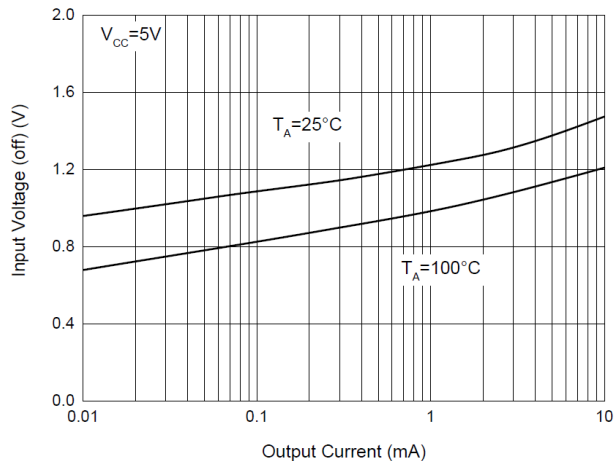
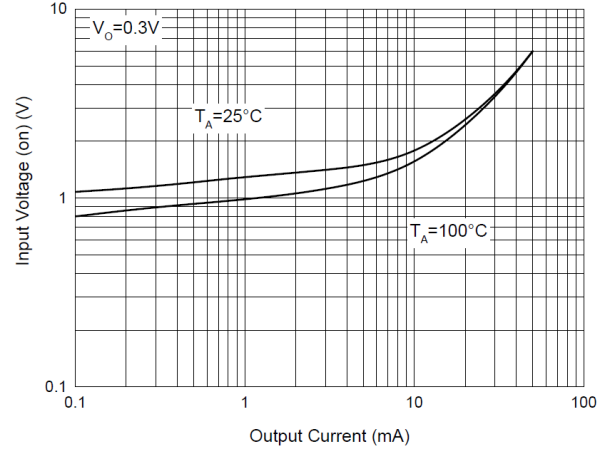
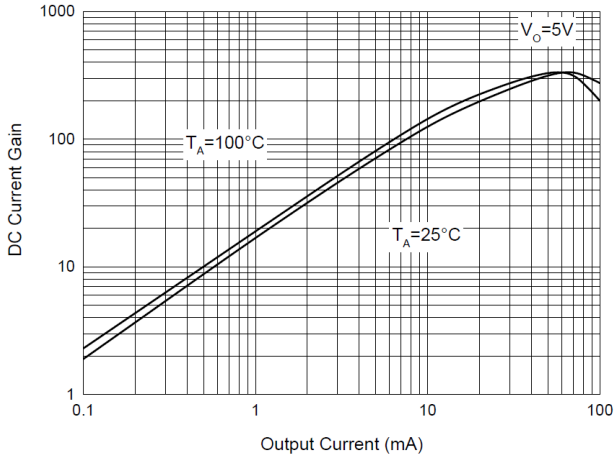
Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	Value	Units
V_{CC}	Collector-Supply Voltage	50	V
V_{IN}	Collector-Input Voltage	-10~40	V
P_D	Collector Power Dissipation	150	mW
I_O	Output Current	50	mA
$I_{C(Max)}$		100	
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55 to 150	°C

Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{I(off)}$	Input Voltage	$V_{CC}=5V, I_O=100\mu A$	0.5			V
$V_{I(on)}$		$V_O=0.3V, I_O=10mA$			3.0	V
$V_{O(on)}$	Output Voltage	$I_O=10mA, I_I=0.5mA$			0.3	V
I_I	Input Current	$V_I=5V$			0.88	mA
$I_{O(off)}$	Output Current	$V_{CC}=50V, V_I=0V$			0.5	uA
G_I	DC Current Gain	$V_O=5V, I_O=5mA$	30			
R_1	Input Resistance		7	10	13	KΩ
R_2/R_1	Resistance Ratio		0.8	1.0	1.2	
f_T	Transition Frequency	$V_{CE}=10V, I_E=-5mA$ $f=100MHz$		250		MHz

Typical Characteristics



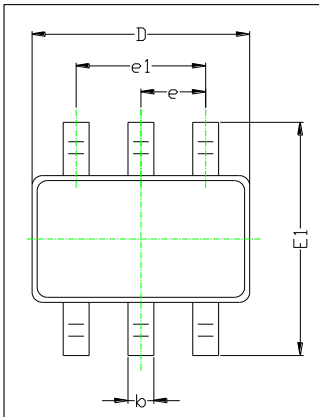
Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
UMH11N	SOT363	Tape & Reel 3000pcs /7" Reel	8mm	4mm	Conductive	

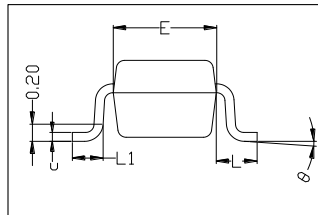
Package Dimensions

Package outline : SOT363

TOP VIEW

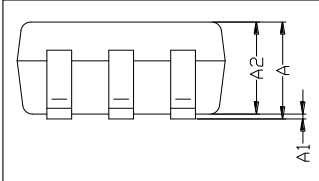


SIDE VIEW

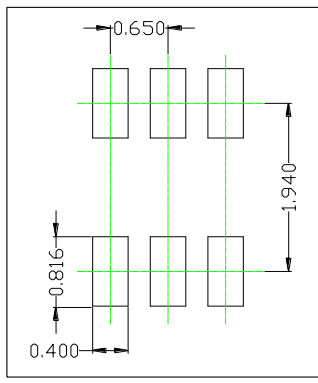


SYMBOL	DIMENSIONS IN MILLIMETER	
	MIN	MAX
A	0.900	1.000
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.100	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.400
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
θ	0°	8°

FRONT VIEW



SOLDRING PATTERN



Notice:

- Lead plating: Pb free solder
- Lead thickness includes solder plating
- Lead frame: CAC-5
- Other Tolerance: ±0.05
- Dimensions are exclusive of Burrs, Mold Flash and Tie Bar extrusions
- Unit: mm