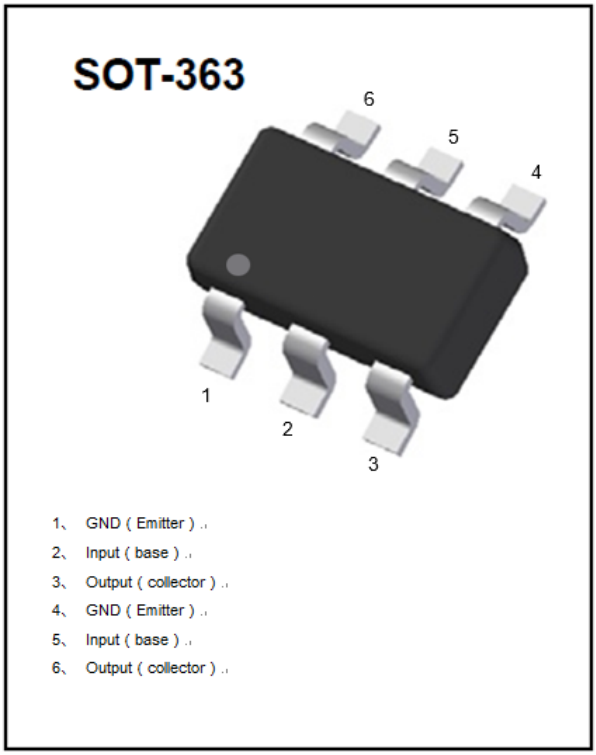
Dual NPN Digital Transistors (Built-in Resistors)



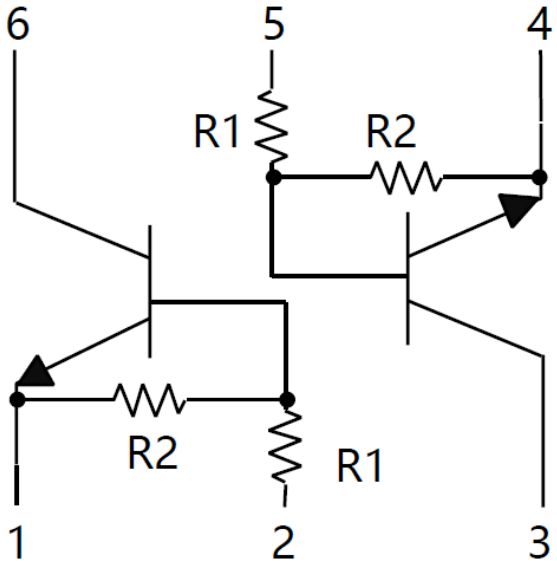
Features

- Epoxy meets UL-94 V-0 flammability rating
- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors
- Surface mount package ideally Suited for Automatic Insertion

Mechanical Data

- **Package:** SOT-363
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:**H11

■Equivalent circuit



■Maximum Ratings (Ta=25℃ Unless otherwise specified)

ITEM	SYMBOL	UNIT	CONDITIONS	VALUE
Supply Voltage	VCC	V		50
Input Voltage	VIN	V		-10 to +40
Output Current	IO	mA		100
Power Dissipation	PD	mW		150
Junction Temperature （Single）	Tj	℃		150
Storage Temperature	TSTG	℃		-55 to +150

■Electrical Characteristics (Ta=25℃ unless otherwise specified)

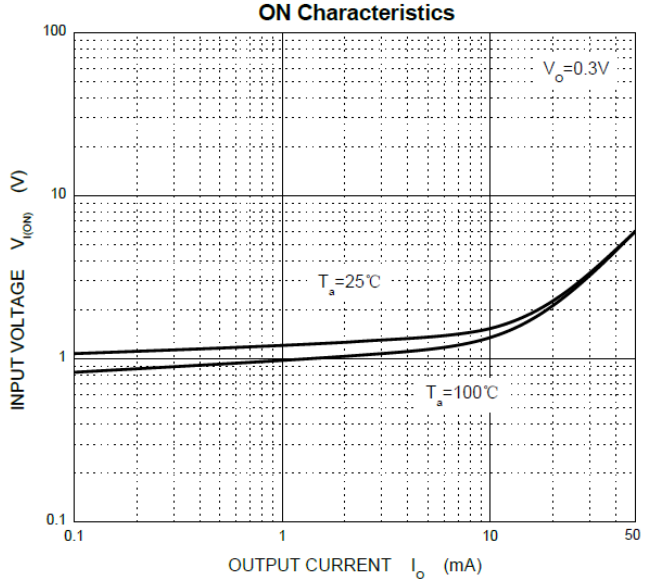
ITEM	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Input voltage	$VI_{(off)}$	V	VCC=5V,Ic=100uA	0.5	-	-
	$VI_{(on)}$	V	V0=0.3V,Ic=10mA	-	-	3
Output voltage	$Vo_{(on)}$	V	Io /Ii =10mA/0.5 mA	-	-	0.3
Input current	II	mA	VI=5V	-	-	0.88
Output current	$I_{O(off)}$	uA	VCC=50V, Vi=0	-	-	0.5
DC current gain	GI		Vo=5V, Io =5mA	30	-	-
Input resistance	R_1	kΩ		7	10	13
Resistance ratio	R_2/R_1			0.8	1	1.2
Transition frequency	fT	MHz	VCE=10V,IE=5mA,f=100MHz	-	250	-

■ Ordering Information (Example)

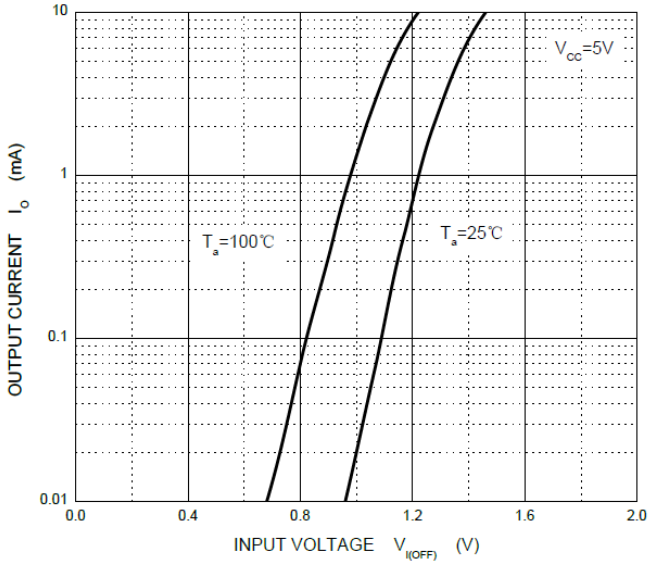
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
UMH11N	F2	Approximate 0.009g	3000	30000	120000	7” reel

■ **Characteristics** (Typical)

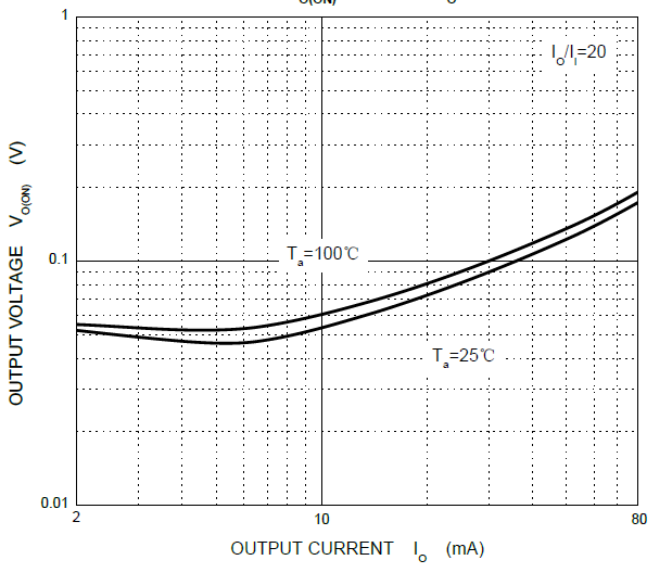
ON Characteristics



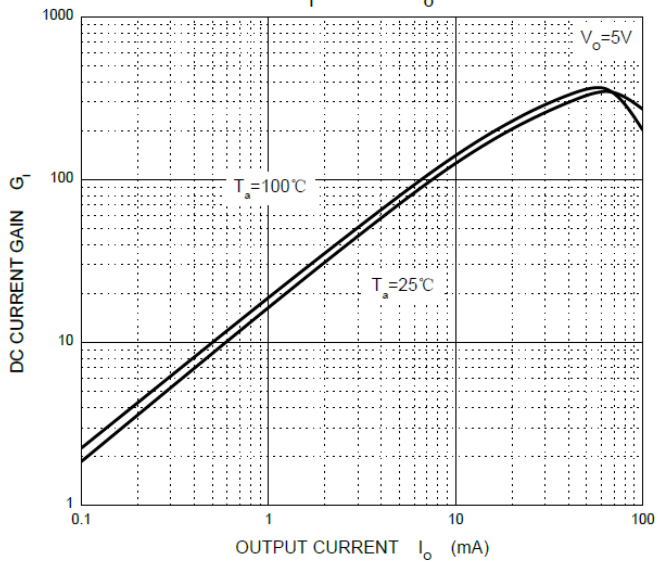
OFF Characteristics



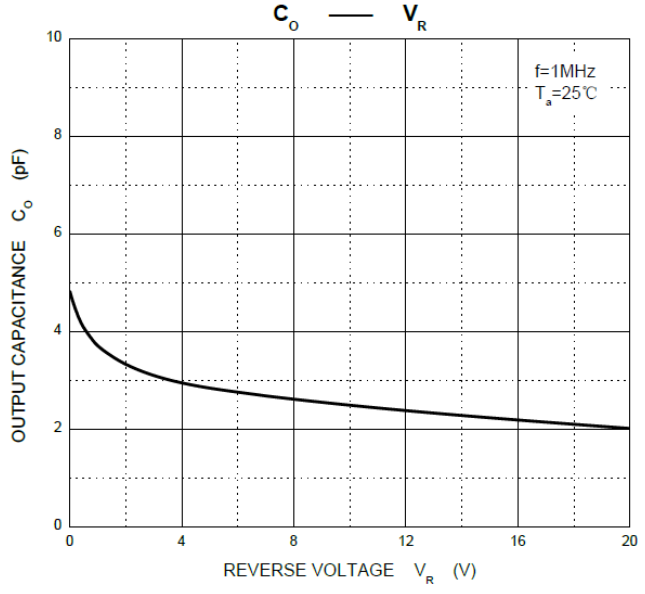
$V_{O(ON)}$ — I_O



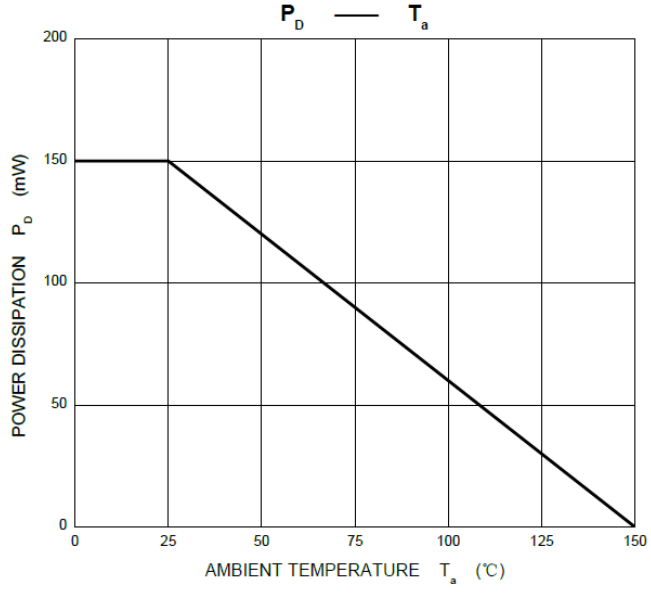
G_I — I_O



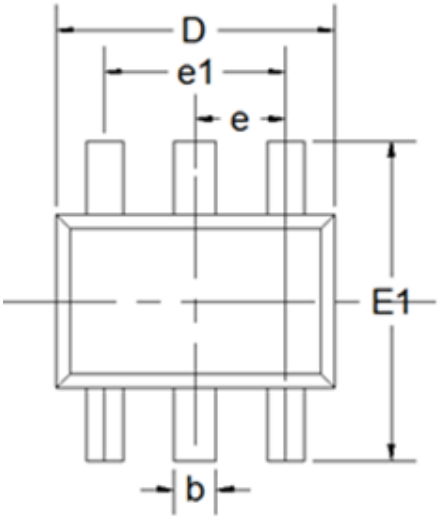
C_O — V_R



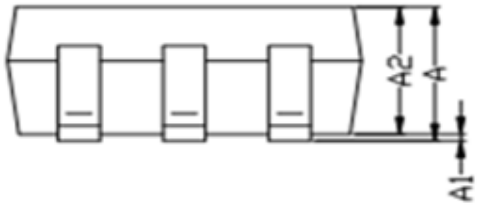
P_D — T_a

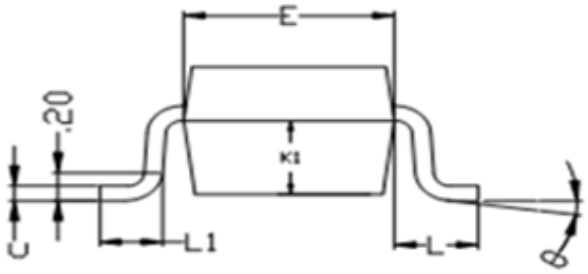


■SOT-363 Package Outline Dimensions

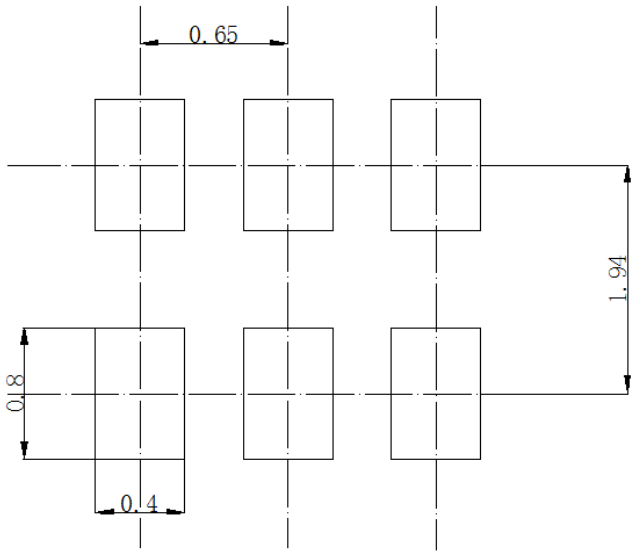


DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.035	0.043	0.9	1.1
A1	0	0.004	0	0.1
A2	0.035	0.039	0.9	1
b	0.006	0.014	0.15	0.35
c	0.002	0.01	0.05	0.25
D	0.071	0.087	1.8	2.2
E	0.045	0.053	1.15	1.35
E1	0.085	0.096	2.15	2.45
e	0.026Typ		0.65Typ	
e1	0.047	0.055	1.2	1.4
L	0.021Typ		0.525Typ	
L1	0.01	0.018	0.26	0.46
θ	0°	8°	0°	8°





■SOT-363 Suggested Pad Layout



Unit：mm

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