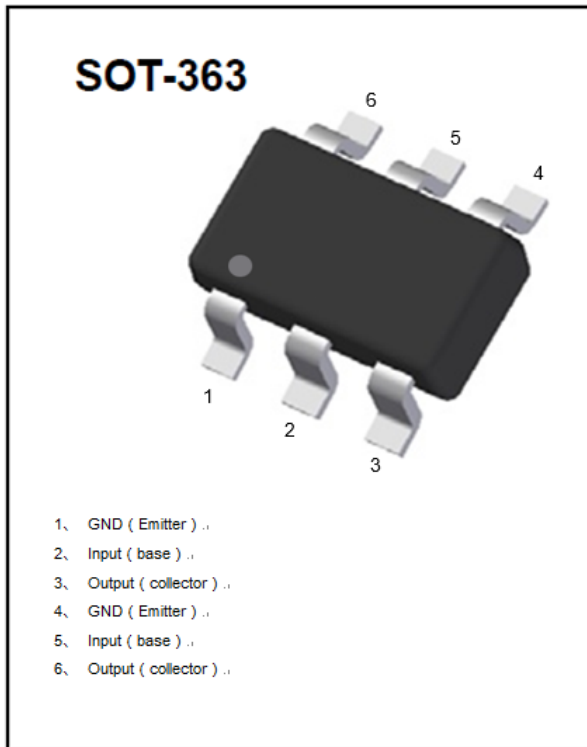


Dual PNP Digital Transistors (Built-in Resistors)



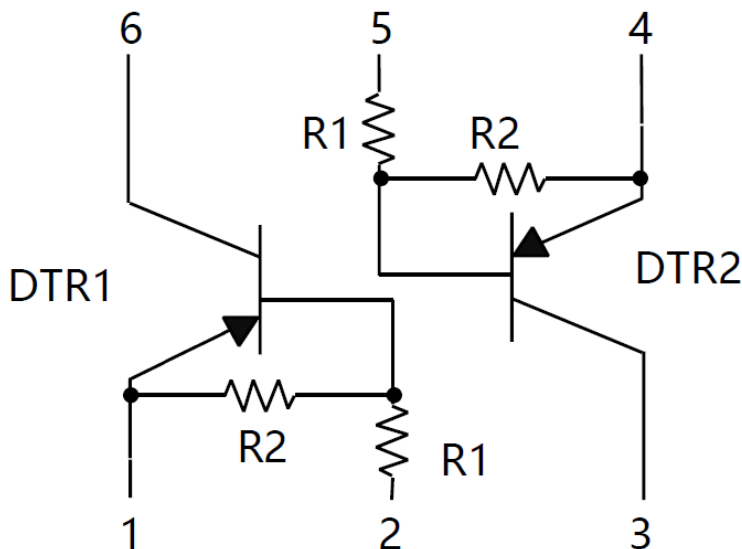
Features

- 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:**B1

■Equivalent circuit





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■Maximum Ratings (Ta=25°C Unless otherwise specified)

ITEM	SYMBOL	UNIT	CONDITIONS	VALUE
Supply Voltage	V _{CC}	V		-50
Input Voltage	V _{IN}	V		-40 to +10
Output Current	I _o	mA		-100
Power Dissipation	P _D	mW		150
Junction Temperature	T _j	°C		150
Storage Temperature	T _{STG}	°C		-55 to +150

■Electrical Characteristics (Ta=25°C unless otherwise specified)

ITEM	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Input voltage	V _{I(off)}	V	V _{CC} =-5V, I _c =-100uA	-0.5	-	-
	V _{I(on)}	V	V _o =-0.2V, I _c =-5mA	-	-	-3
Output voltage	V _{O(on)}	V	I _o / I _i = -10mA / -0.5 mA	-	-	-0.3
Input current	I _i	mA	V _i =-5V	-	-	-0.36
Output current	I _{O(off)}	uA	V _{CC} =-50V, V _i =0	-	-	-0.5
DC current gain	G _I		V _o =-5V, I _o =-5mA	56	-	-
Input resistance	R ₁	kΩ		15.4	22	28.6
Resistance ratio	R ₂ /R ₁			0.8	1	1.2
Transition frequency	f _T	MHz	V _{CE} =-10V, I _E =-5mA, f=100MHz	-	250	-

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
UMB1N	F2	Approximate 0.009g	3000	30000	120000	7" reel



■ Characteristics (Typical)

Fig. 1 - DC Current Gain Characteristics

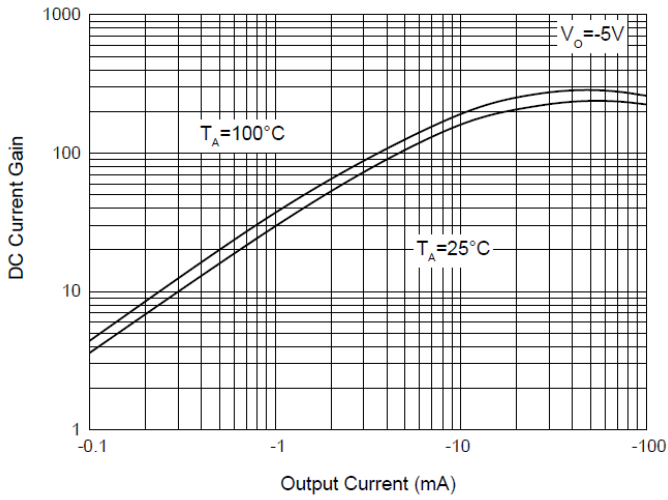


Fig. 2 - Input Voltage (on) Characteristics

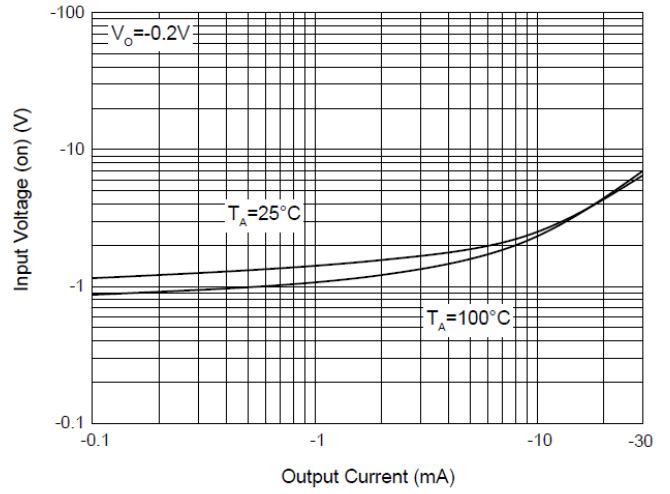


Fig. 3 - Input Voltage (off) Characteristics

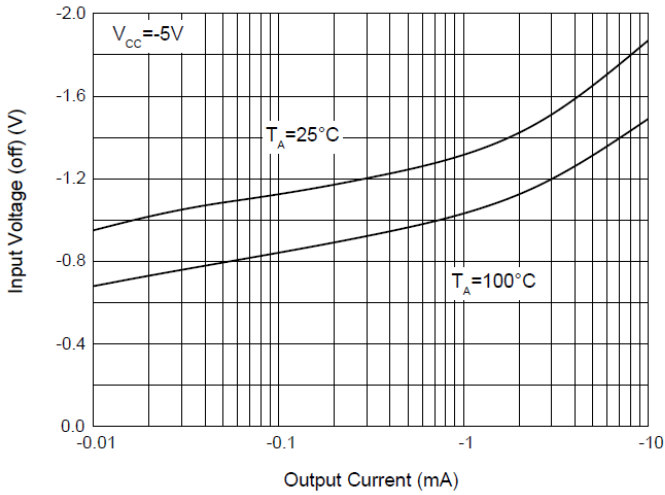
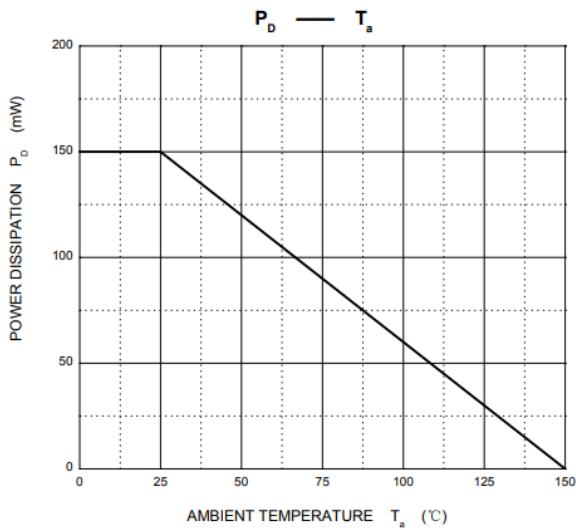
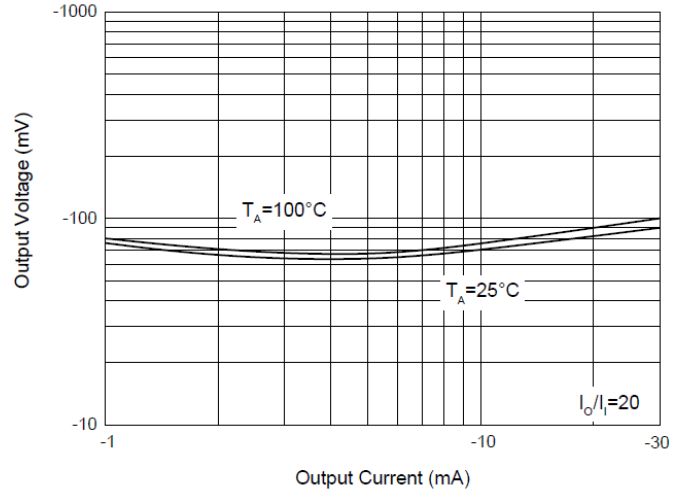


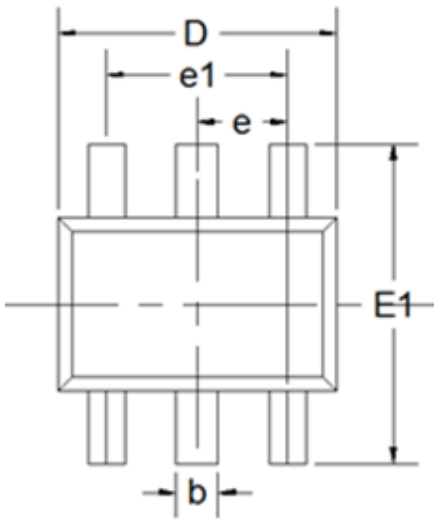
Fig. 4 - Output Voltage Characteristics



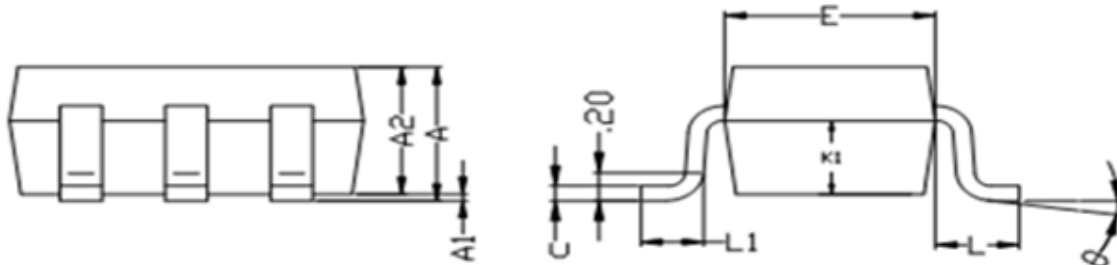


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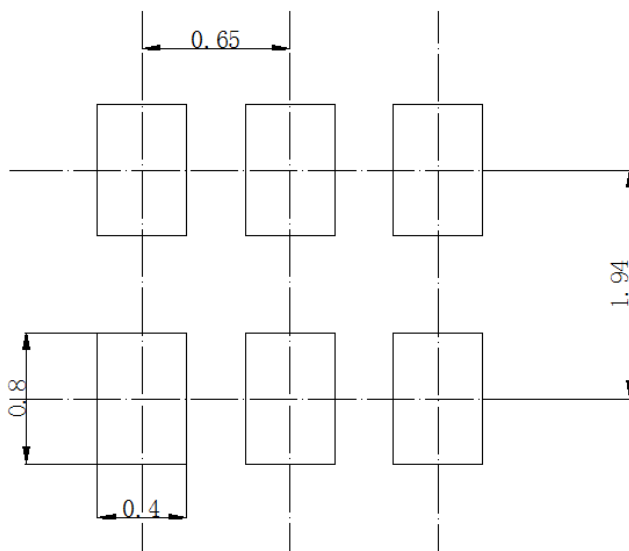
■SOT-363 Package Outline Dimensions



DIM	DIMENSIONS			
	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
φ	0°	8°	0°	8°



■SOT-363 Suggested Pad Layout



Unit: mm



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