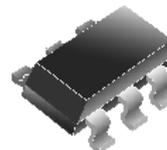


RoHS Compliant Product
A suffix of "-C" specifies halogen and lead free

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

SOT-363



MARKING

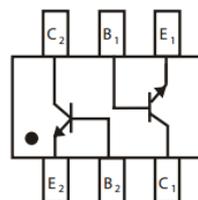
H2

PACKAGING DIMENSION

Package	MPQ	Leader Size
SOT-363	3K	7 inch

ORDER INFORMATION

Part Number	Type
UMH2N-C	Lead (Pb)-free and Halogen-free



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Supply Voltage	V _{CC}	50	V
Input Voltage	V _{IN}	-10~40	V
Output Current	I _O	100	mA
Power Dissipation	P _D	150	mW
Junction, Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Input Voltage	V _{I(off)}	0.5	-	-	V	V _{CC} =5V, I _C =100μA
	V _{I(on)}	-	-	3		V _O =0.3V, I _C =2mA
Output Voltage	V _{O(on)}	-	-	0.3		I _O / I _I =10mA / 0.5mA
Input Current	I _I	-	-	0.18	mA	V _I =5V
Output Current	I _{O(off)}	-	-	0.5	μA	V _{CC} =50V, V _I =0
DC Current Gain	G _I	68	-	-		V _O =5V, I _O =5mA
Input Resistance	R ₁	32.9	47	61.1	kΩ	
Resistance Ratio	R ₂ /R ₁	0.8	1	1.2		
Transition Frequency	f _T	-	250	-	MHz	V _{CE} =10V, I _E =5mA, f=100MHz

CHARACTERISTIC CURVES

Fig. 1 - DC Current Gain Characteristics

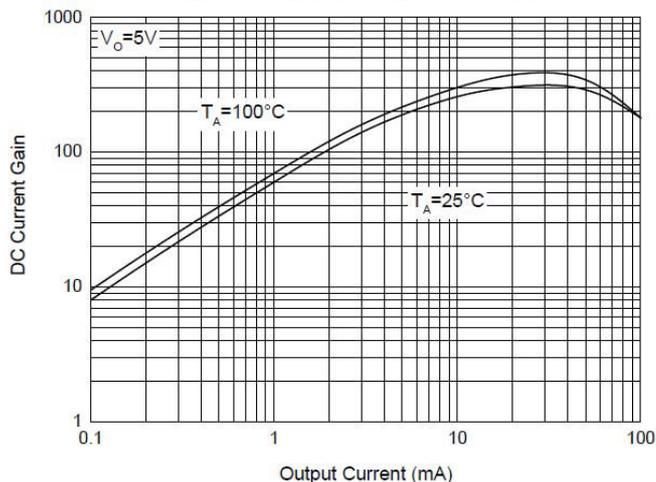


Fig. 2 - Input Voltage (on) Characteristics

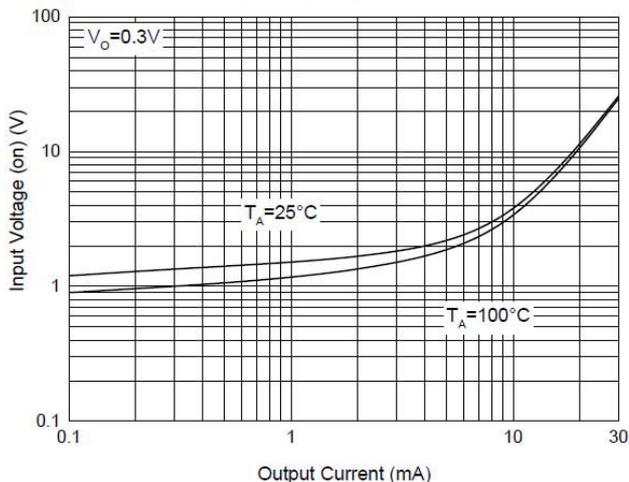


Fig. 3 - Input Voltage (off) Characteristics

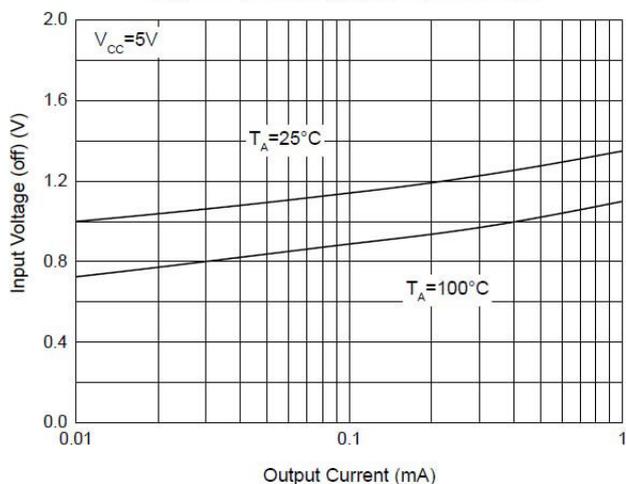
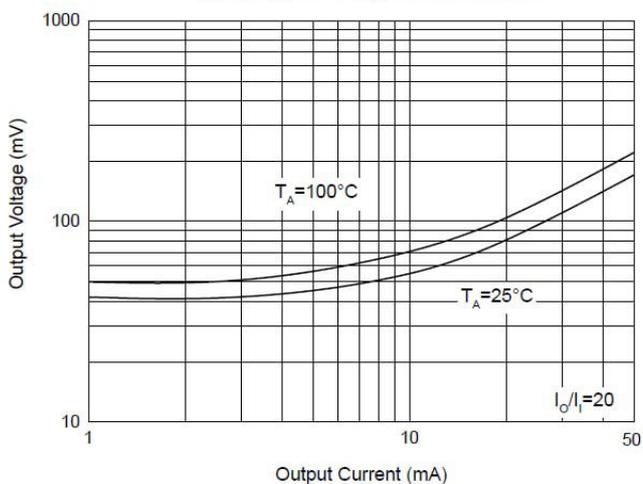
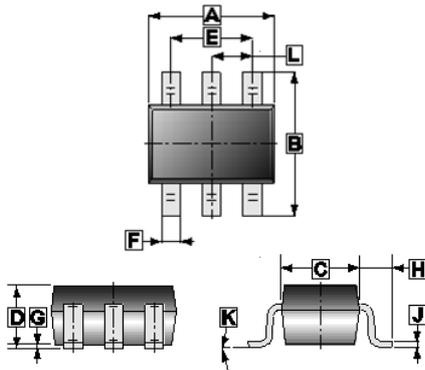


Fig. 4 - Output Voltage Characteristics



PACKAGE OUTLINE DIMENSIONS

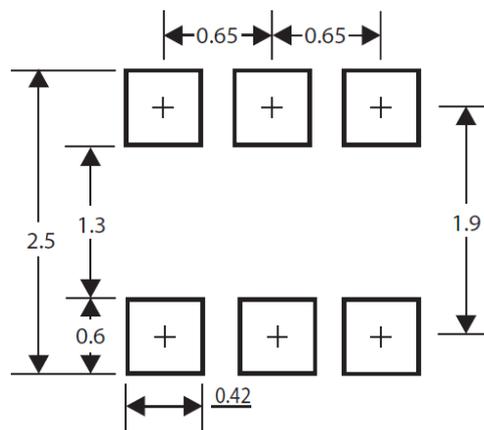
SOT-363



REF.	Millimeter	
	Min.	Max.
A	1.80	2.20
B	1.80	2.45
C	1.15	1.35
D	0.70	1.10
E	1.30 REF.	
F	0.10	0.35
G	0.10 REF.	
H	0.525 REF.	
J	0.05	0.25
K	8°	
L	0.65 TYP.	

MOUNTING PAD LAYOUT

SOT-363



*Dimensions in millimeters