MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage (Referenced to GND)	−0.5 to +6.5	V
V_{IN}	DC Input Voltage (Referenced to GND)	−0.5 to V_{CC} +0.5	V
V_{OUT}	DC Output Voltage (Referenced to GND) (Note 1)	−0.5 to V_{CC} +0.5	V
I_{IK}	DC Input Diode Current	±20	mA
I_{OK}	DC Output Diode Current	±50	mA
I_{OUT}	DC Output Sink/Source Current	±50	mA
I_{CC}	DC Supply Current, per Output Pin	±50	mA
I_{GND}	DC Ground Current, per Output Pin	±100	mA
T_{STG}			

DC CHARACTERISTICS

Symbol	Parameter	V_{CC} (V)	74AC T_A = +25°C Typ	74AC T_A = –40°C to +85°C Guaranteed Limits		Unit	Conditions
V_{IH}	Minimum High Level Input Voltage	3.0 4.5 5.5	1.5 2.25 2.75	2.1 3.15 3.85	2.1 3.15 3.85	V	V_{OUT} = 0.1 V or V_{CC} – 0.1 V
V_{IL}	Maximum Low Level Input Voltage	3.0 4.5 5.5	1.5 2.25 2.75	0.9 1.35 1.65	0.9 1.35 1.65	V	V_{OUT} = 0.1 V or V_{CC} – 0.1 V
V_{OH}	Minimum High Level Output Voltage	3.0 4.5 5.5	2.99 4.49 5.49	2.9 4.4 5.4	2.9 4.4 5.4	V	I_{OUT} = –50 μA
		3.0 4.5 5.5	– – –	2.56 3.86 4.86	2.46 3.76 4.76	V	*V_{IN} = V_{IL} or V_{IH} –12 mA I_{OH} –24 mA –24 mA
V_{OL}	Maximum Low Level Output Voltage	3.0 4.5 5.5	0.002 0.001 0.001	0.1 0.1 0.1	0.1 0.1 0.1	V	I_{OUT} = 50 μA
		3.0 4.5 5.5	– – –	0.36 0.36 0.36	0.44 0.44 0.44	V	*V_{IN} = V_{IL} or V_{IH} 12 mA I_{OL} 24 mA 24 mA
I_{IN}	Maximum Input Leakage Current	5.5	–	±0.1	±1.0	[redacted]	V_I = V_{CC}, GND
I_{OZ}	Maximum 3-State Current	5.5	–	±0.5	±5.0	μA	V_I (OE) = V_{IL}, V_{IH} V_I = V_{CC}, GND V_O = V_{CC}, GND
I_{OLD}	†Minimum Dynamic Output Current	5.5	–	–	75	mA	

AC CHARACTERISTICS (For Figures and Waveforms − See AND8277/D at www.onsemi.com)

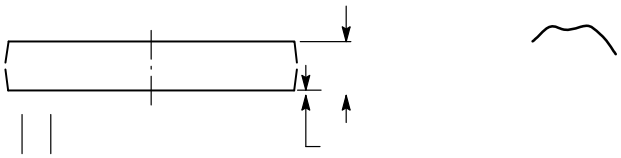
Symbol

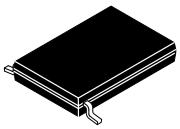
ORDERING INFORMATION

Device	Marking	Package	Shipping†
MC74AC540DWG	AC540	SOIC−20	38 Units / Rail
MC74AC540DWR2G	AC540	SOIC−20	1000 / Tape & Reel
MC74ACT540DWG	ACT540	SOIC−20	38 Units / Rail
MC74ACT540DWR2G	ACT540	SOIC−20	1000 / Tape & Reel
MC74ACT540DTR2G	ACT 540	TSSOP−20	2500 / Tape & Reel
MC74AC541DWG	AC541	SOIC−20	38 Units / Rail
MC74AC541DWR2G	AC541	SOIC−20	1000 / Tape & Reel
MC74ACT541DWG	ACT541	SOIC−20	38 Units / Rail
MC74ACT541DWR2G	ACT541	SOIC−20	1000 / Tape & Reel
[redacted]DWR2G	ACT541	SOIC−20	1000 / Tape & Reel
MC74AC541DTR2G			

SOIC−20 WB
CASE 751D−05
ISSUE H

DATE 22 APR 2015





SCALE 2:1

TSSOP−20 WB
CASE 948E
ISSUE D

DATE 17 FEB 2016