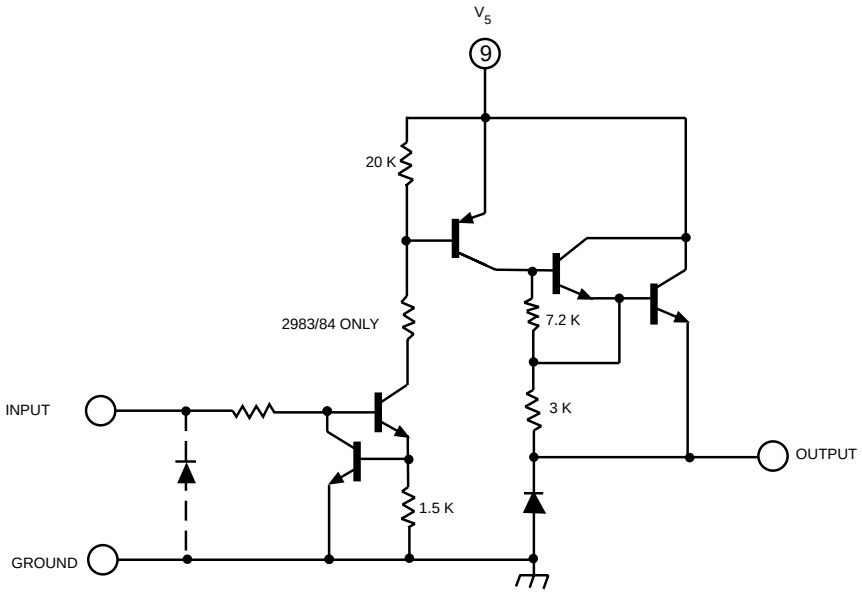
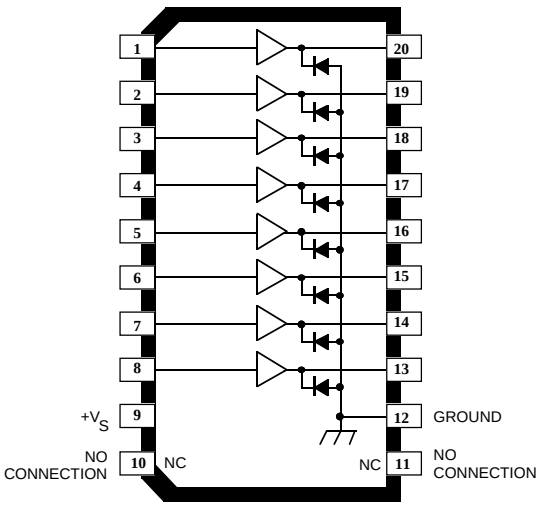
One of Eight Drivers

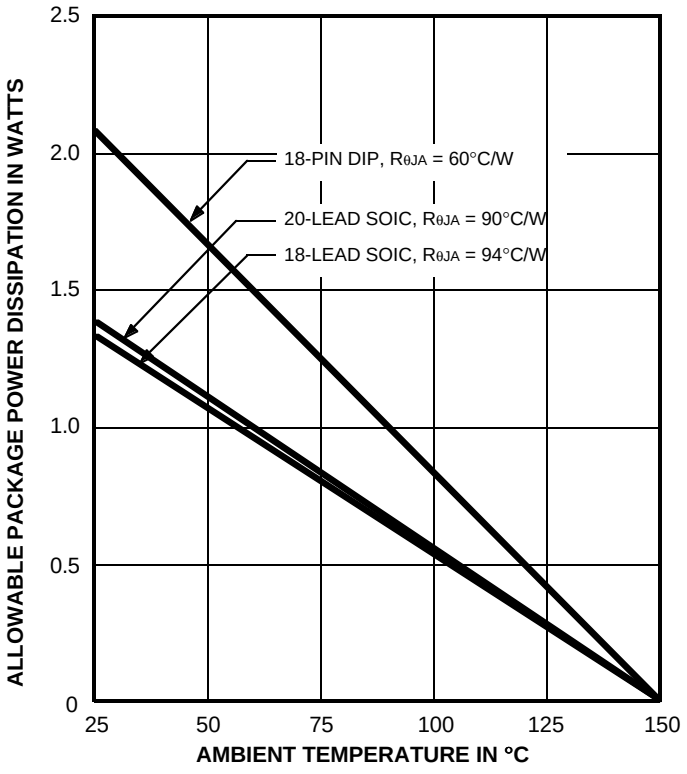


Dwg. No. A-10,242B

A2982SLW and A2984SLW



Dwg. PP-064-2



Dwg. GP-022-4A

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

Characteristic	Symbol	Applicable Devices	Test Conditions	Test Fig.	Limits			
					Min.	Typ.	Max.	Units
Output Leakage Current	I_{CEX}	2981/82†	V_{IN} = 0.4 V*, V_S = 50 V, T_A = +70°C	1	—	—	200	µA
		2983/84†	V_{IN} = 0.4 V*, V_S = 80 V, T_A = +70°C	1	—	—	200	µA
Output Sustaining Voltage	$V_{CE(SUS)}$	2981/82†	I_{OUT} = -45 mA	—	35	—	—	V
		2983/84†	I_{OUT} = -70 mA	—	45	—	—	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	All	V_{IN} = 2.4 V, I_{OUT} = -100 mA	2	—	1.6	1.8	V
			V_{IN} = 2.4 V, I_{OUT} = -225 mA	2	—	1.7	1.9	V
			V_{IN} = 2.4 V, I_{OUT} = -350 mA	2	—	1.8	2.0	V
Input Current	$I_{IN(ON)}$	2981/83A	V_{IN} = 2.4 V	3	—	140	200	µA
			V_{IN} = 3.85 V	3	—	310	450	µA
		2982/84†	V_{IN} = 2.4 V	3	—	140	200	µA
			V_{IN} = 12 V	3	—	1.25	1.93	mA
Output Source Current (Outputs Open)	I_{OUT}	2981/83A	V_{IN} = 2.4 V, V_{CE} = 2.0 V	2	-350	—	—	mA
		2982/84†	V_{IN} = 2.4 V, V_{CE} = 2.0 V	2	-350	—	—	mA
Supply Current Leakage Current	I_S	2981/82†	V_{IN} = 2.4 V*, V_S = 50 V	4	—	—	10	mA
		2983/84†	V_{IN} = 2.4 V*, V_S = 80 V	4	—	—	10	mA
Clamp Diode Forward Voltage	I_R	2981/82†	V_R = 50 V, V_{IN} = 0.4 V*	5	—	—	50	µA
		2983/84†	V_R = 80 V, V_{IN} = 0.4 V*	5	—	—	50	µA
Clamp Diode	V_F	All	I_F = 350 mA	6	—	1.5	2.0	V
Turn-On Delay	t_{ON}	All	0.5 E_{IN} to 0.5 E_{OUT}, R_L = 100Ω, V_S = 35 V	—	—	1.0	2.0	µs
Turn-Off Delay	t_{OFF}	All	0.5 E_{IN} to 0.5 E_{OUT}, R_L = 100Ω, V_S = 35 V, See Note	—	—	5.0	10	µs

NOTES: Turn-off delay is influenced by load conditions. Systems applications well below the specified output loading may require timing considerations for some designs, i.e., multiplexed displays or when used in combination with sink drivers in a totem pole configuration.

Negative current is defined as coming out of (sourcing) the specified device terminal.

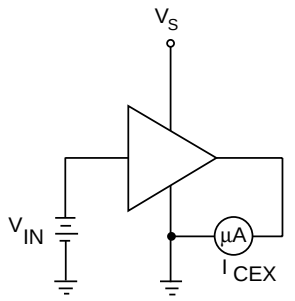
* All inputs simultaneously.

† Complete part number includes a prefix (A or UDN) and a suffix (A or SLW) as follows:
UDN2981A,
UDN2982A, UDN2982LW, or A2982SLW,
UDN2983A,
UDN2984A, UDN2984LW, or A2984SLW.

The A2984SLW, UDN2984A, & UDN2984LW are discontinued.
Shown for reference only.

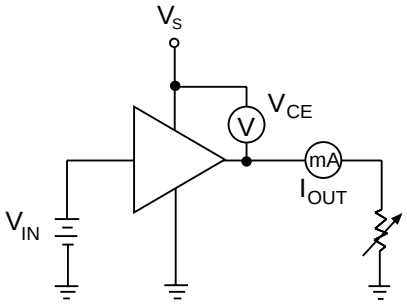
TEST FIGURES

Figure 1



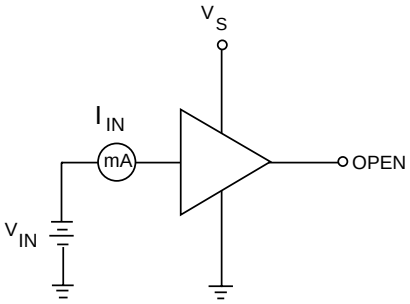
Dwg. No. A-11,083

Figure 2



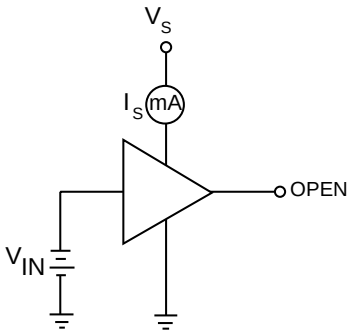
Dwg. No. A-11,084

Figure 3



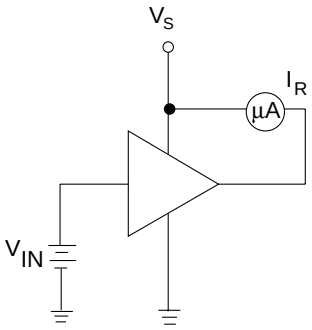
Dwg. No. A-11,085

Figure 4



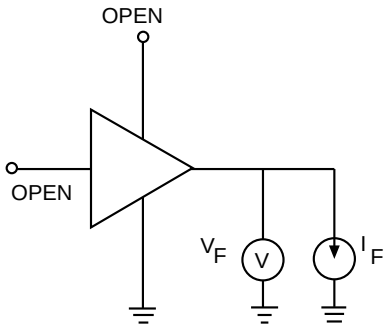
Dwg. No. A-11,086

Figure 5



Dwg. No. A-11,087

Figure 6



Dwg. No. A-11,088

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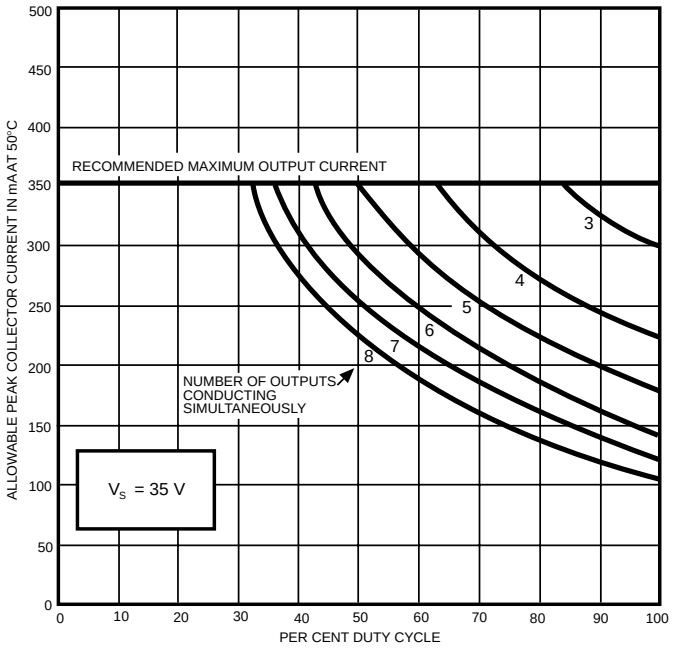
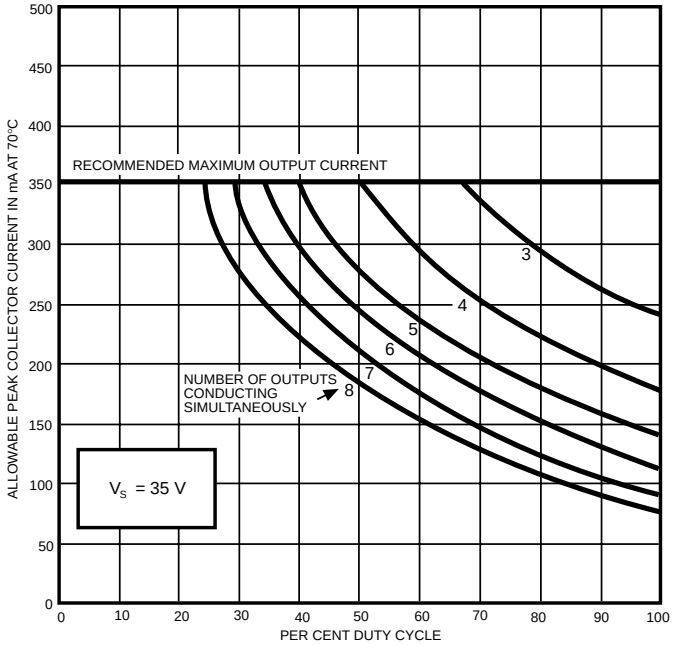
Allowable peak collector current as a function of duty cycle

Series UDN2980A

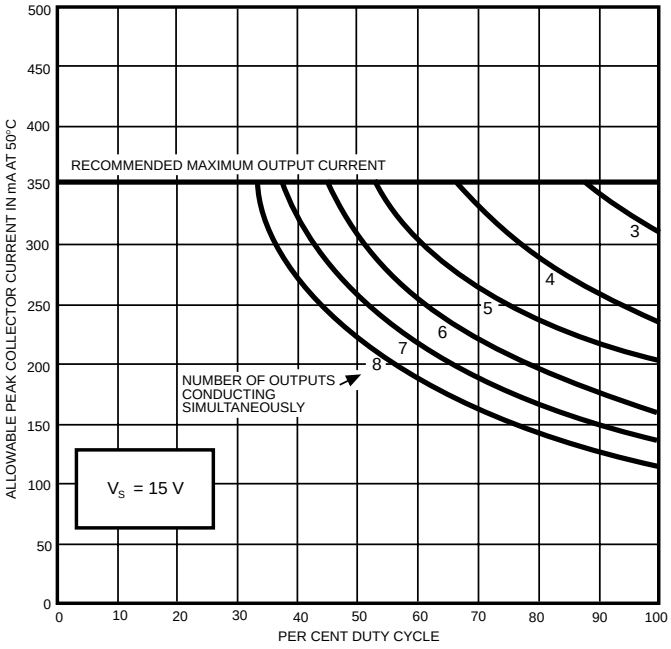


Dwg. No. A-11,106B

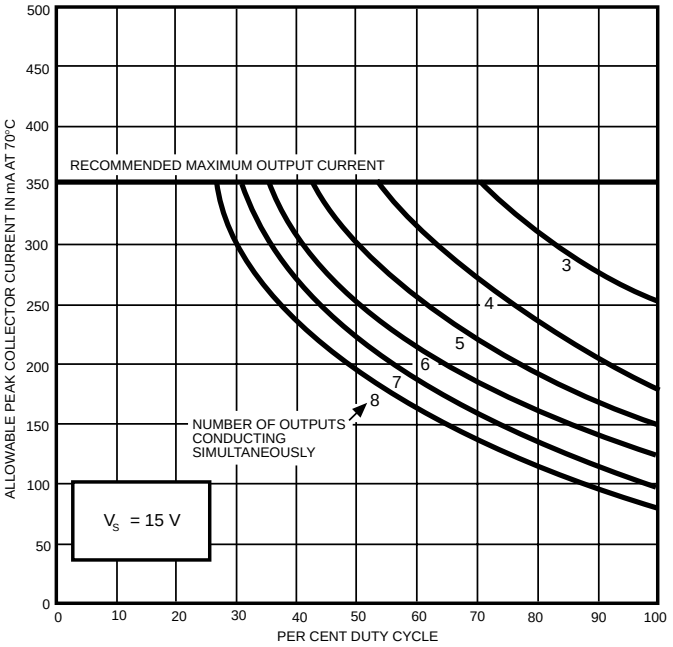


Dwg. No. A-11,111B

UDN2981A and UDN2982A



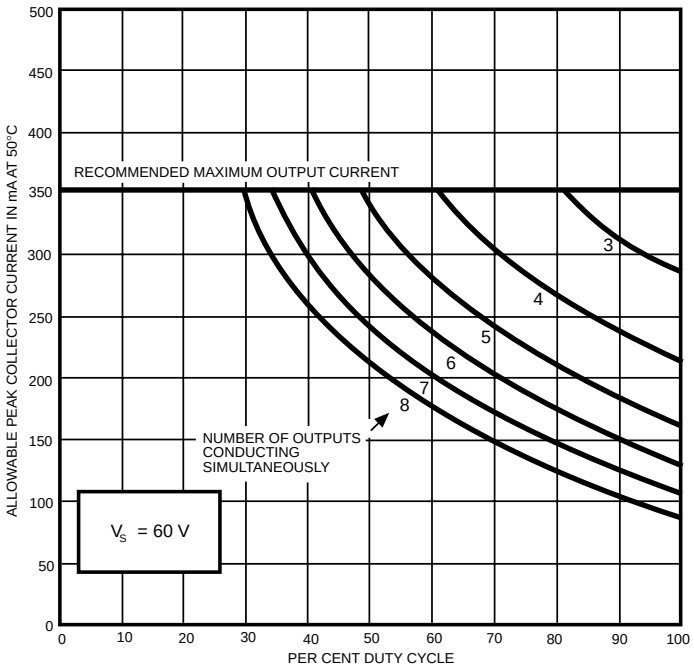
Dwg. No. A-11,107B



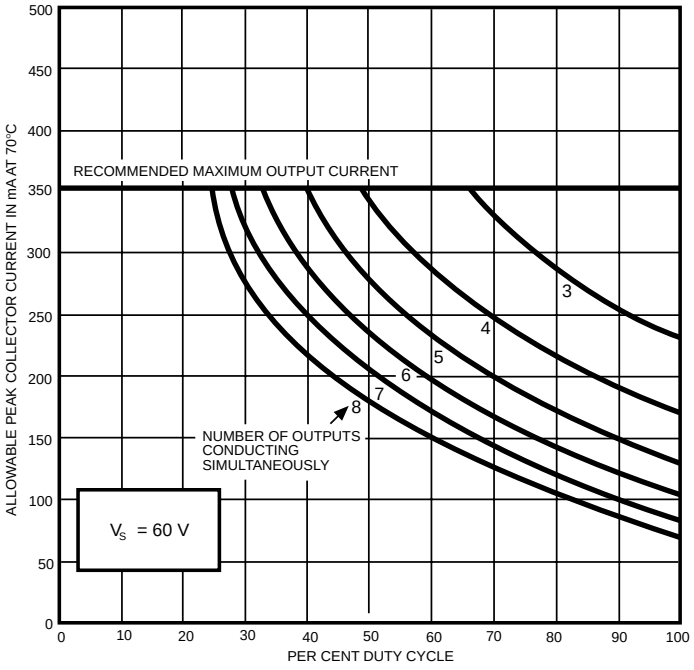
Dwg. No. A-11,108B

Allowable peak collector current as a function of duty cycle

UDN2983A and UDN2984A

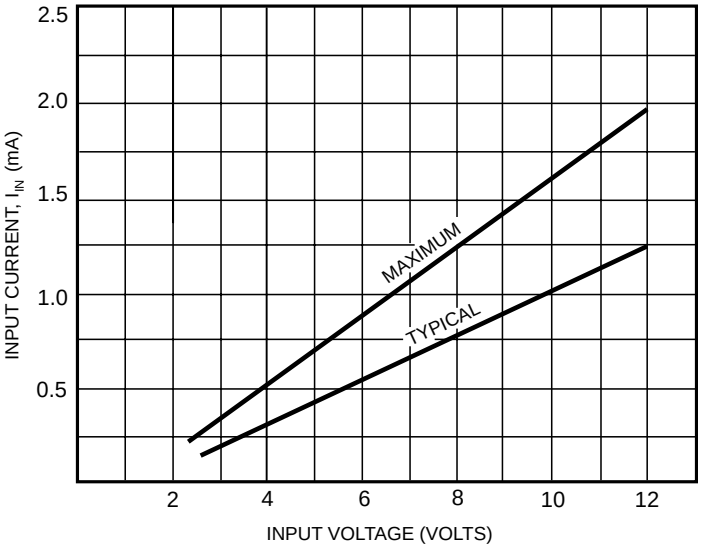


Dwg. No. A-11,109B



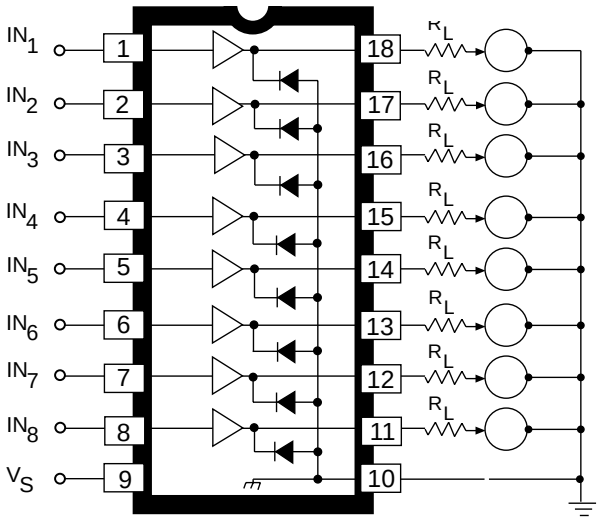
Dwg. No. A-11,110B

Input current as a function of input voltage



Dwg. No. A-11,115B

Typical electrosensitive printer application



Dwg. No. A-11,113A

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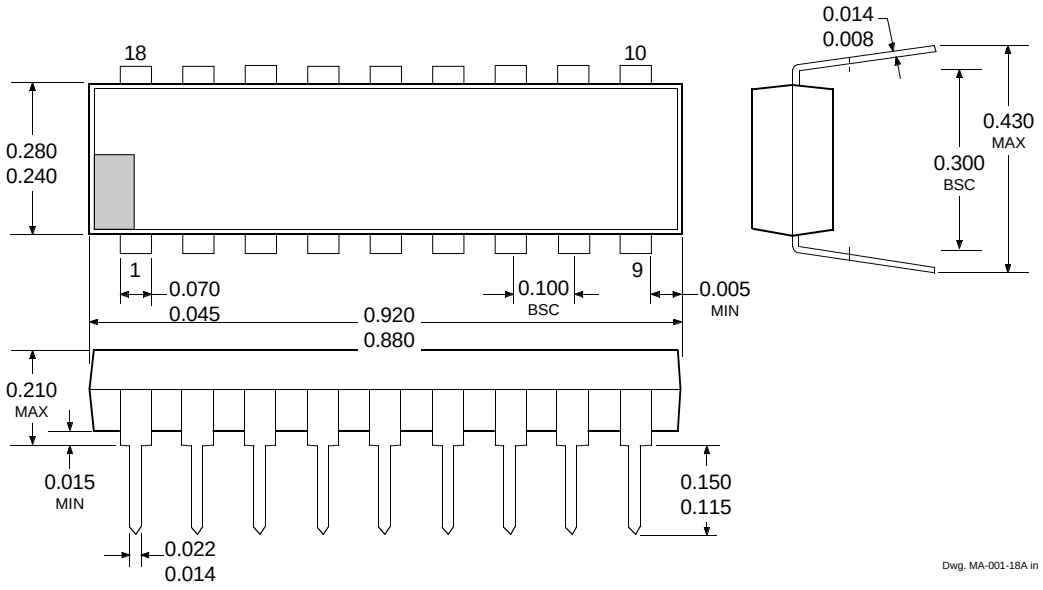
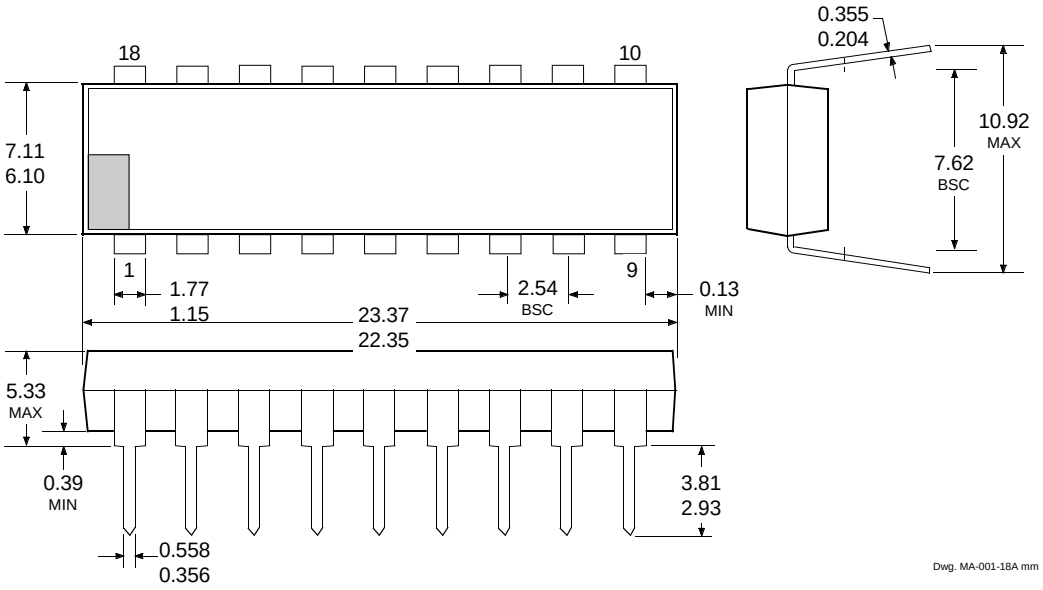
UDN2981A, UDN2982A, UDN2983A, and UDN2984A

Dimensions in Inches
(controlling dimensions)



Dimensions in Millimeters
(for reference only)



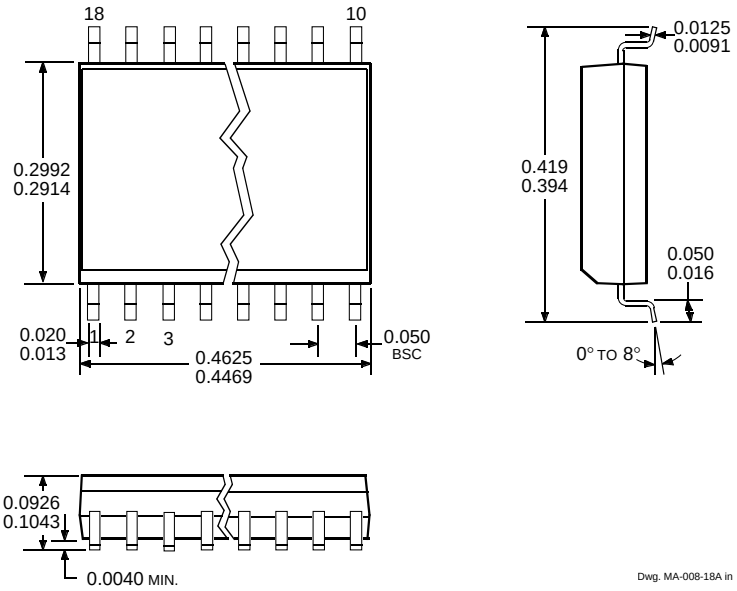
NOTES: 1. Exact body and lead configuration at vendor's option within limits shown.
2. Lead spacing tolerance is non-cumulative.
3. Lead thickness is measured at seating plane or below.
4. Supplied in standard sticks/tubes of 21 devices.

UDN2982LW and UDN2984LW

(add “TR” to part number for tape and reel)

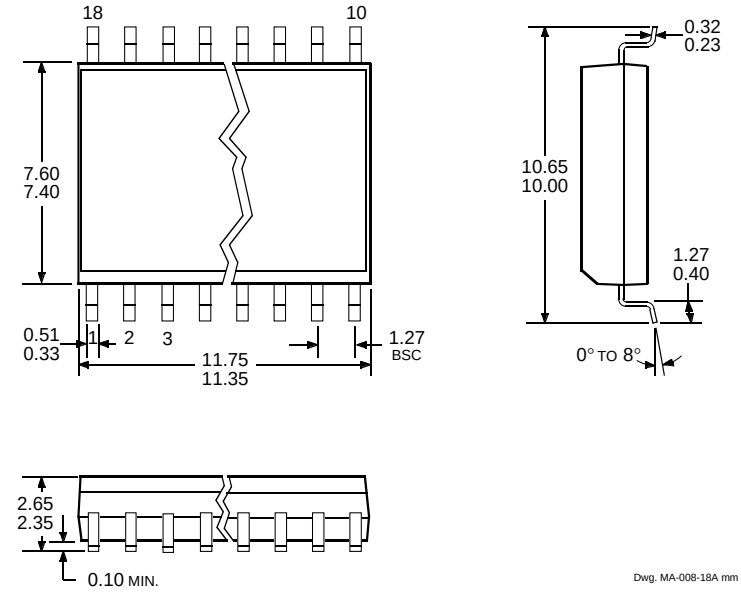
Dimensions in Inches

(for reference only)



Dimensions in Millimeters

(controlling dimensions)



NOTES: 1. Exact body and lead configuration at vendor’s option within limits shown.
2. Lead spacing tolerance is non-cumetive.
3. Supplied in standard sticks/tubes of 41 devices or add “TR” to part number for tape and reel.

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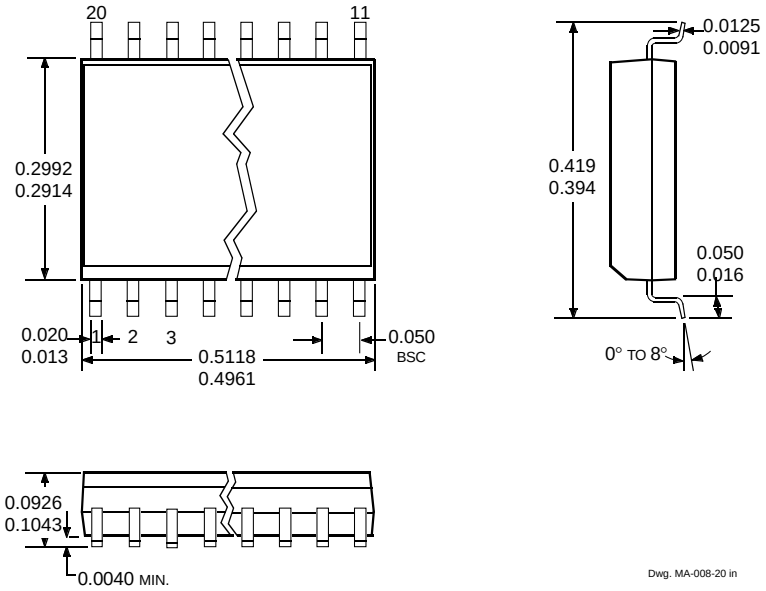
A2982SLW and A2984SLW

(add “TR” to part number for tape and reel)

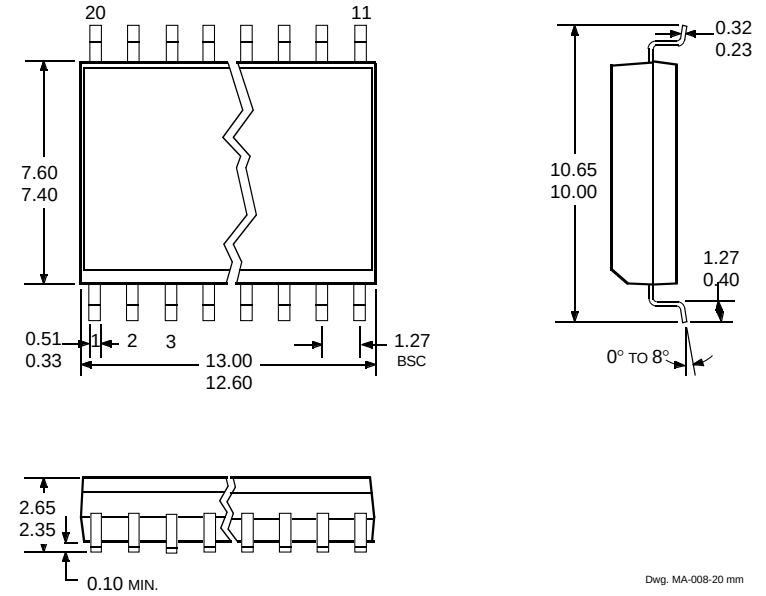
Dimensions in Inches

(for reference only)



Dimensions in Millimeters

(controlling dimensions)



NOTES: 1. Exact body and lead configuration at vendor’s option within limits shown.
2. Lead spacing tolerance is non-cumulative.
3. Supplied in standard sticks/tubes of 37 devices or add “TR” to part number for tape and reel.

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