Description

The AZ2940 is a low dropout three-terminal regulator with a typical dropout of 280mV at 1A output current.

The AZ2940 provides current limit and thermal shutdown. On-chip thermal shutdown provides protection against any combination of high current and ambient temperature that would create excessive junction temperatures.

The AZ2940 has 1.2V, 1.8V, 2.5V, 3.3V and 5.0V versions.

The AZ2940 series is available in the industry standard TO-220-3, TO-220F-3, TO-263-3, TO-252-2 (3), TO-252-2 (4), TO-252-2 (5) and SOT-223 power packages. (Detailed information please refer to pages 13, 14)

Applications

- LCD TV
- Set Top Box
- LCD Monitor
- SMPS Post Regulator
- Laptop, Palmtop and Notebook
- Portable Instrumentation
- USB Power Supply

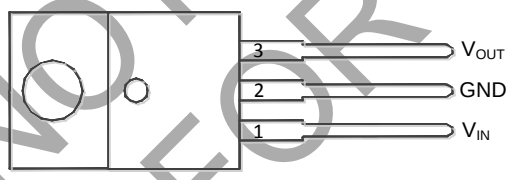
Features

- Minimum Guaranteed Output Current: 1A
- Dropout Voltage at I_{OUT} = 1A: 280mV Typ. (Except 1.2V and 1.8V Versions)
- Output Accuracy: ±1%
- Low Ground Current
- Internal Current Limit and Thermal Protection
- Reversed-battery and Reversed-lead Insertion Protection
- Fast Transient Response
- TO-220-3, TO-263-3, TO-252-2 (3), TO-252-2 (4), TO-252-2 (5)
  - **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- Available in “Green” Packages: TO-220-3, TO-220F-3, TO-263-3, TO-252-2 (3), TO-252-2 (4), TO-252-2 (5) and SOT-223
  - **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
  - **Halogen and Antimony Free. “Green” Device (Note 3)**
- **For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please contact us or your local Diodes representative. https://www.diodes.com/quality/product-definitions/**

Notes:
1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated’s definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

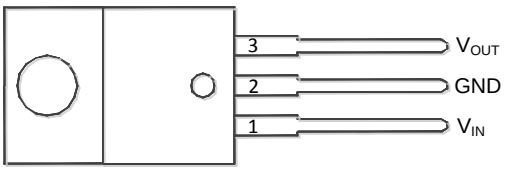
Pin Assignments

(Front View)



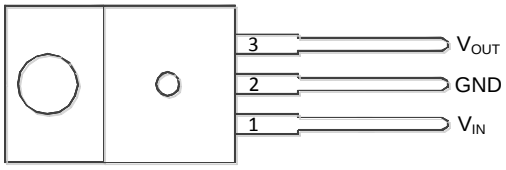
TO-220-3 (Option 1)

(Front View)



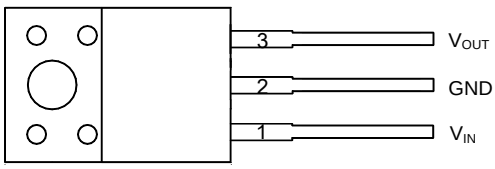
TO-220-3 (Option 2)

(Front View)



TO-220-3 (Option 3)

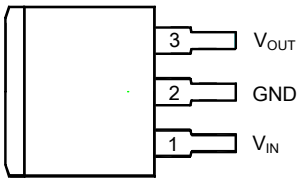
(Front View)



TO-220F-3

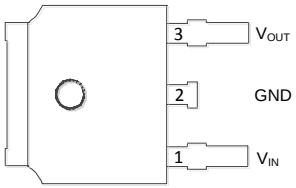
Pin Assignments (Cont.)

(Top View)



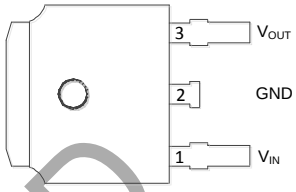
TO-263-3

(Top View)



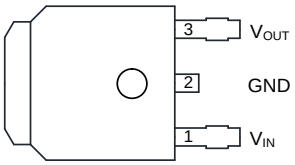
TO-252-2 (3) (Option 1)

(Top View)



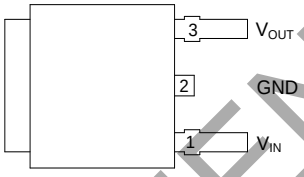
TO-252-2 (3) (Option 2)

(Top View)



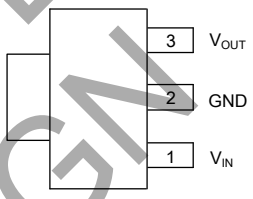
TO-252-2 (4)

(Top View)



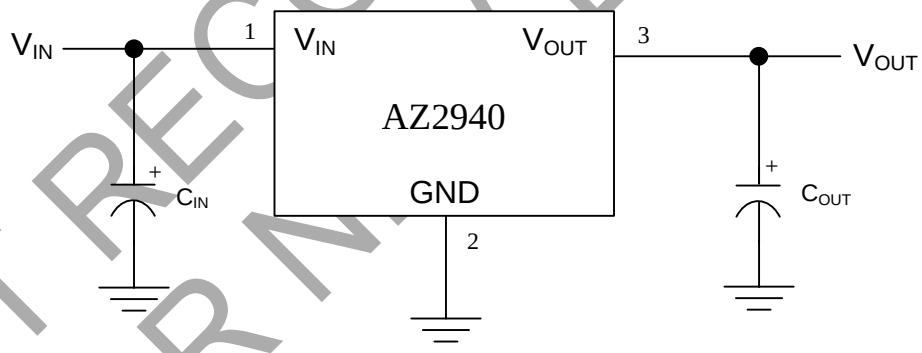
TO-252-2 (5)

(Top View)



SOT-223

Typical Applications Circuit (Note 4)

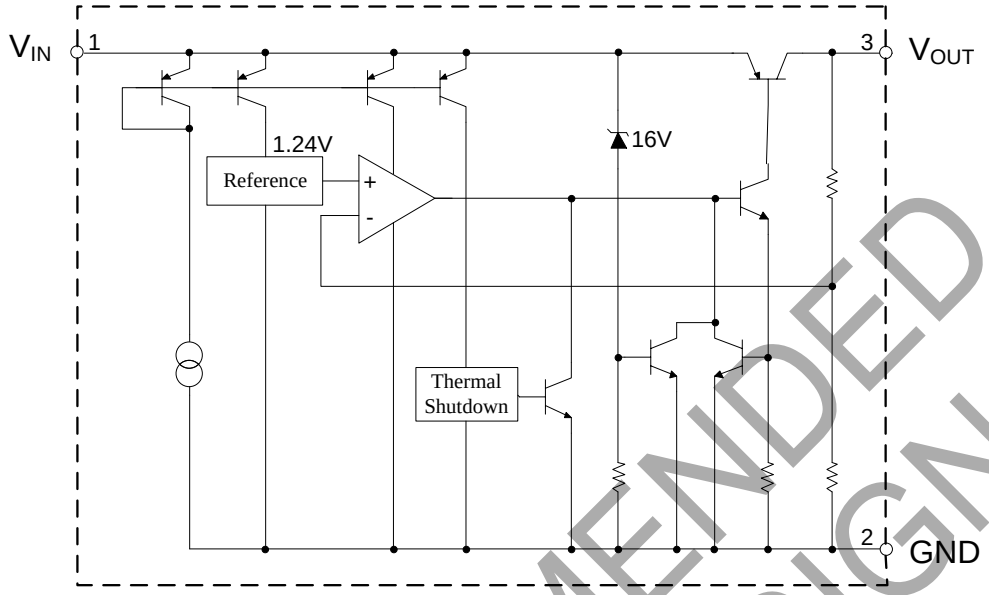


Note 4: C_{IN} is required if regulator is located far from power supply filter and is recommended to be 0.47µF or greater. To maintain stability, C_{OUT} is recommended to be 2.2µF or greater. The ESR of this capacitor is critical, please see curve.

Pin Description

Pin Number	Pin Name	Function
1	V_{IN}	Unregulated Input
2	GND	Ground pin. This pin and TAB are internally connected
3	V_{OUT}	Regulated Output

Functional Block Diagram



Absolute Maximum Ratings (Note 5)

Symbol	Parameter	Rating		Unit
V_{IN}	Input Voltage	16		V
T_J	Operating Junction Temperature	+150		°C
T_{STG}	Storage Temperature Range	-65 to +150		°C
T_{LEAD}	Lead Temperature (Soldering, 10sec)	+260		°C
θ_{JA}	Thermal Resistance (Junction to Ambient)	TO-220-3/TO-220F-3	60	°C/W
		TO-263-3	60	
		TO-252-2 (3)/(4)/(5)	100	
		SOT-223	120	
ESD	ESD (Human Body Model)	5000		V
ESD	ESD (Machine Model)	300		V

Note: 5. Stresses greater than those listed under *Absolute Maximum Ratings* can cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under *Recommended Operating Conditions* is not implied. Exposure to *Absolute Maximum Ratings* for extended periods can affect device reliability.

Recommended Operating Conditions

Symbol	Parameter	Min	Max	Unit
V_{IN}	Input Voltage	2.5	13.2	V
T_J	Operating Junction Temperature	-40	+125	°C

Electrical Characteristics

AZ2940-1.2 Electrical Characteristics

(Operating Conditions: V_{IN} = 2.5V, I_{OUT} = 10mA, C_{IN} = 10µF, C_{OUT} = 10µF, T_J = +25ºC, unless otherwise specified. The **Boldface** applies over -40ºC to +125ºC)

Symbol	Parameter	Condition		Min	Typ	Max	Unit
V_{OUT}	Output Voltage	I_{OUT} = 10mA		1.188	1.2	1.212	V
		10mA ≤ I_{OUT} ≤ 1A, 2.5V ≤ V_{IN} ≤ 13.2V		**1.176**	**1.2**	**1.224**	V
V_{RLINE}	Line Regulation	I_{OUT} = 10mA, 2.5V ≤ V_{IN} ≤ 13.2V		–	3.6	18	mV
V_{RLOAD}	Load Regulation	V_{IN} = 2.5V, 10mA ≤ I_{OUT} ≤ 1A		–	5.4	27	mV
$\Delta V_{OUT}/\Delta T$	Output Voltage Temperature Coefficient	I_{OUT} = 10mA		–	–	**180**	µV/ºC
I_{GND}	Ground Current	V_{IN} = 2.5V	I_{OUT} = 750mA	–	12	**25**	mA
			I_{OUT} = 1A	–	18	–	mA
I_{SC}	Short Circuit Current	V_{OUT} = 0V (Note 6)		1.5	2.2	–	A
$I_{LOAD\ (MIN)}$	Minimum Load Current	–		–	1	5	mA
–	Output Noise Voltage (rms)	10Hz to 100kHz, I_{OUT} = 100mA, C_{OUT} = 10µF		–	400	–	µV
θ_{JC}	Thermal Resistance	TO-252-2 (3)/(4)/(5)		–	7.8	–	ºC/W
		SOT-223		–	29.7	–	

Note 6: $V_{IN} = V_{OUT(NOMINAL)}$+1V.

Electrical Characteristics (Cont.)

AZ2940-1.8 Electrical Characteristics

(Operating Conditions: V_{IN} = 2.8V, I_{OUT} = 10mA, C_{IN} = 10µF, C_{OUT} = 10µF, T_J = +25ºC, unless otherwise specified. The **Boldface** applies over -40ºC to +125ºC)

Symbol	Parameter	Condition		Min	Typ	Max	Unit
V_{OUT}	Output Voltage	I_{OUT} = 10mA		1.782	1.8	1.818	V
		10mA ≤ I_{OUT} ≤ 1A, 2.8V ≤ V_{IN} ≤ 13.2V		**1.764**	**1.8**	**1.836**	V
V_{RLINE}	Line Regulation	I_{OUT} = 10mA, 2.8V ≤ V_{IN} ≤ 13.2V		–	3.6	18	mV
V_{RLOAD}	Load Regulation	V_{IN} = 2.8V, 10mA ≤ I_{OUT} ≤ 1A		–	5.4	27	mV
$\Delta V_{OUT}/\Delta T$	Output Voltage Temperature Coefficient	I_{OUT} = 10mA		–	**36**	**180**	µV/ºC
V_{DROP}	Dropout Voltage (Note 7)	ΔV_{OUT} = 1%	I_{OUT} = 100mA	–	290	**500**	mV
			I_{OUT} = 1A	–	330	**750**	mV
I_{GND}	Ground Current	V_{IN} = 2.8V	I_{OUT} = 750mA	–	12	**25**	mA
			I_{OUT} = 1A	–	18	–	mA
I_{SC}	Short Circuit Current	V_{OUT} = 0V (Note 6)		1.5	2.2	–	A
$I_{LOAD\ (MIN)}$	Minimum Load Current	–		–	1	5	mA
–	Output Noise Voltage (rms)	10Hz to 100kHz, I_{OUT} = 100mA, C_{OUT} = 10µF		–	400	–	µV
θ_{JC}	Thermal Resistance	TO-252-2 (3)/(4)/(5)		–	7.8	–	ºC/W
		SOT-223		–	29.7	–	

Notes: 6. V_{IN} = $V_{OUT(NOMINAL)}$+1V.

7. Dropout voltage is defined as the input-to-output differential when the output voltage drops to 99% of its nominal value which is measured at V_{OUT}+1V applied to V_{IN}. In application, V_{IN} should be no less than 2.5V.

Electrical Characteristics (Cont.)

AZ2940-2.5 Electrical Characteristics

(Operating Conditions: V_{IN} = 3.5V, I_{OUT} = 10mA, C_{IN} = 10µF, C_{OUT} = 10µF, T_J = +25ºC, unless otherwise specified. The **Boldface** applies over -40ºC to +125ºC)

Symbol	Parameter	Condition		Min	Typ	Max	Unit
V_{OUT}	Output Voltage	I_{OUT} = 10mA		2.475	2.5	2.525	V
		10mA ≤ I_{OUT} ≤ 1A, 3.5V ≤ V_{IN} ≤ 13.2V		**2.45**	**2.5**	**2.55**	V
V_{RLINE}	Line Regulation	I_{OUT} = 10mA, 3.5V ≤ V_{IN} ≤ 13.2V		–	5.0	25	mV
V_{RLOAD}	Load Regulation	V_{IN} = 3.5V, 10mA ≤ I_{OUT} ≤ 1A		–	7.5	37.5	mV
$\Delta V_{OUT}/\Delta T$	Output Voltage Temperature Coefficient	I_{OUT} = 10mA		–	**50**	**250**	µV/ºC
V_{DROP}	Dropout Voltage (Note 8)	ΔV_{OUT} = 1%	I_{OUT} = 100mA	–	70	**200**	mV
			I_{OUT} = 1A	–	280	**550**	mV
I_{GND}	Ground Current	V_{IN} = 3.5V	I_{OUT} = 750mA	–	12	**25**	mA
			I_{OUT} = 1A	–	18	–	mA
I_{SC}	Short Circuit Current	V_{OUT} = 0V (Note 6)		1.5	2.2	–	A
$I_{LOAD\ (MIN)}$	Minimum Load Current	–		–	1	5	mA
–	Output Noise Voltage (rms)	10Hz to 100kHz, I_{OUT} = 100mA, C_{OUT} = 10µF		–	400	–	µV
θ_{JC}	Thermal Resistance	TO-252-2 (3)/(4)/(5)		–	7.8	–	ºC/W
		SOT-223		–	29.7	–	

Notes: 6. $V_{IN} = V_{OUT(NOMINAL)}$+1V.

8. Dropout voltage is defined as the input-to-output differential when the output voltage drops to 99% of its nominal value which is measured at V_{OUT}+1V applied to V_{IN}.

Electrical Characteristics (Cont.)

AZ2940-3.3 Electrical Characteristics

(Operating Conditions: V_{IN} = 4.3V, I_{OUT} = 10mA, C_{IN} = 10µF, C_{OUT} = 10µF, T_J = +25ºC, unless otherwise specified. The **Boldface** applies over -40ºC to +125ºC)

Symbol	Parameter	Condition		Min	Typ	Max	Unit
V_{OUT}	Output Voltage	I_{OUT} = 10mA		3.27	3.3	3.33	V
		10mA ≤ I_{OUT} ≤ 1A, 4.3V ≤ V_{IN} ≤ 13.2V		**3.23**	**3.3**	**3.37**	V
V_{RLINE}	Line Regulation	I_{OUT} = 10mA, 4.3V ≤ V_{IN} ≤ 13.2V		–	6.6	33	mV
V_{RLOAD}	Load Regulation	V_{IN} = 4.3V, 10mA ≤ I_{OUT} ≤ 1A		–	9.9	50	mV
$\Delta V_{OUT}/\Delta T$	Output Voltage Temperature Coefficient	I_{OUT} = 10mA		–	**66**	**330**	µV/ºC
V_{DROP}	Dropout Voltage (Note 8)	ΔV_{OUT} = 1%	I_{OUT} = 100mA	–	70	**200**	mV
			I_{OUT} = 1A	–	280	**550**	mV
I_{GND}	Ground Current	V_{IN} = 4.3V	I_{OUT} = 750mA	–	12	**25**	mA
			I_{OUT} = 1A	–	18	–	mA
I_{SC}	Short Circuit Current	V_{OUT} = 0V (Note 6)		1.5	2.2	–	A
$I_{LOAD\ (MIN)}$	Minimum Load Current	–		–	1	5	mA
–	Output Noise Voltage (rms)	10Hz to 100kHz, I_{OUT} = 100mA, C_{OUT} = 10µF		–	400	–	µV
θ_{JC}	Thermal Resistance	TO-220-3		–	4.4	–	ºC/W
		TO-263-3		–	4.4	–	
		TO-252-2 (3)/(4)/(5)		–	7.8	–	
		SOT-223		–	29.7	–	

Notes: 6. V_{IN} = $V_{OUT(NOMINAL)}$+1V.

8. Dropout voltage is defined as the input-to-output differential when the output voltage drops to 99% of its nominal value which is measured at V_{OUT}+1V applied to V_{IN}.

Electrical Characteristics (Cont.)

AZ2940-5.0 Electrical Characteristics

(Operating Conditions: V_{IN} = 6V, I_{OUT} = 10mA, C_{IN} = 10µF, C_{OUT} = 10µF, T_J = +25°C, unless otherwise specified. The **Boldface** applies over -40°C to +125°C)

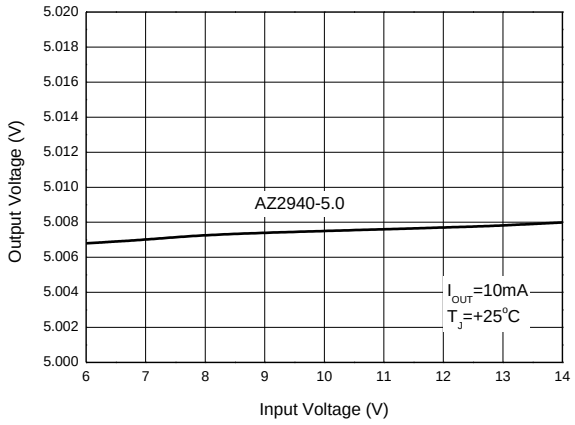
Symbol	Parameter	Condition		Min	Typ	Max	Unit
V_{OUT}	Output Voltage	I_{OUT} = 10mA		4.95	5.0	5.05	V
		10mA ≤ I_{OUT} ≤ 1A, 6V ≤ V_{IN} ≤ 13.2V		**4.90**	**5.0**	**5.10**	V
V_{RLINE}	Line Regulation	I_{OUT} = 10mA, 6V ≤ V_{IN} ≤ 13.2V		–	10	50	mV
V_{RLOAD}	Load Regulation	V_{IN} = 6V, 10mA ≤ I_{OUT} ≤ 1A		–	15	75	mV
$\Delta V_{OUT}/\Delta T$	Output Voltage Temperature Coefficient	I_{OUT} = 10mA		–	**100**	**500**	µV/°C
V_{DROP}	Dropout Voltage (Note 8)	ΔV_{OUT} = 1%	I_{OUT} = 100mA	–	70	**200**	mV
			I_{OUT} = 1A	–	280	**550**	mV
I_{GND}	Ground Current	V_{IN} = 6V	I_{OUT} = 750mA	–	12	**25**	mA
			I_{OUT} = 1A	–	18	–	mA
I_{SC}	Short Circuit Current	V_{OUT} = 0V (Note 6)		1.5	2.2	–	A
$I_{LOAD\ (MIN)}$	Minimum Load Current	–		–	1	5	mA
–	Output Noise Voltage (rms)	10Hz to 100kHz, I_{OUT} = 100mA, C_{OUT} = 10µF		–	400	–	µV
θ_{JC}	Thermal Resistance	TO-220-3/TO-220F-3		–	4.4	–	°C/W
		TO-263-3		–	4.4	–	
		TO-252-2 (3)/(4)/(5)		–	7.8	–	
		SOT-223		–	29.7	–	

Notes: 6. V_{IN} = $V_{OUT(NOMINAL)}$+1V.

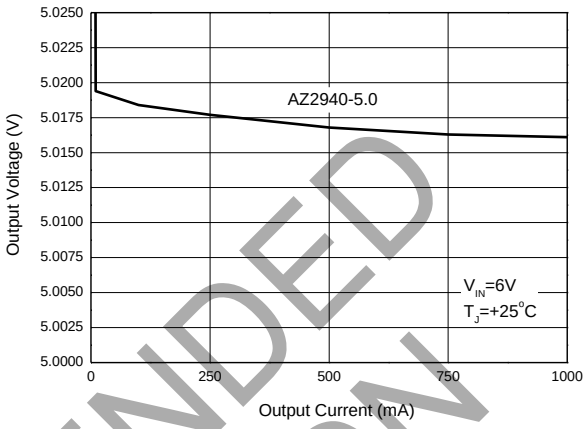
8. Dropout voltage is defined as the input-to-output differential when the output voltage drops to 99% of its nominal value which is measured at V_{OUT}+1V applied to V_{IN}.

Performance Characteristics

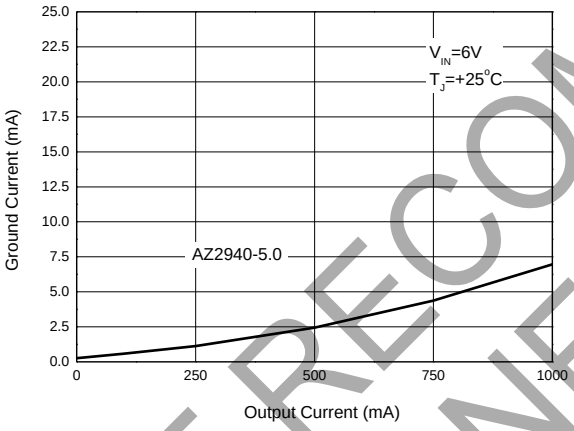
Line Regulation



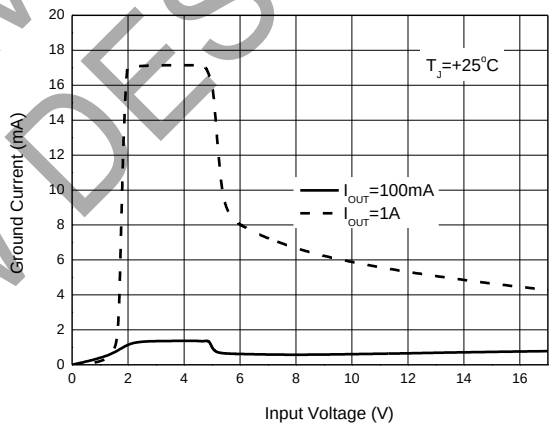
Load Regulation



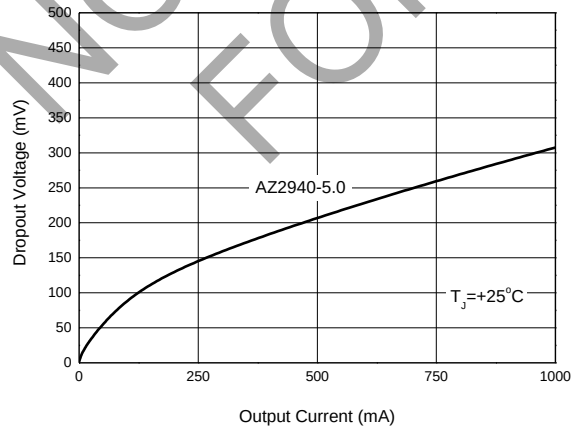
Ground Current vs. Output Current



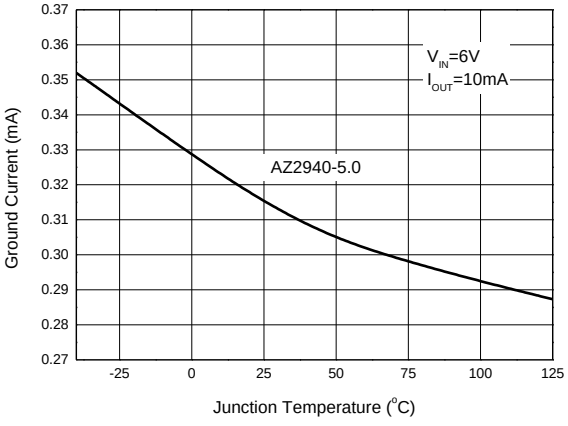
Ground Current vs. Input Voltage



Dropout Voltage vs. Output Current

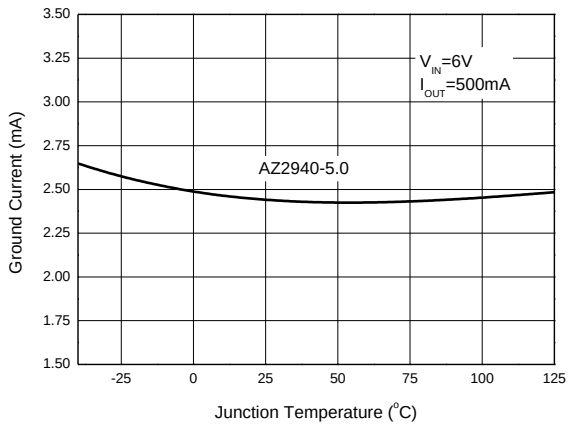


Ground Current vs. Junction Temperature

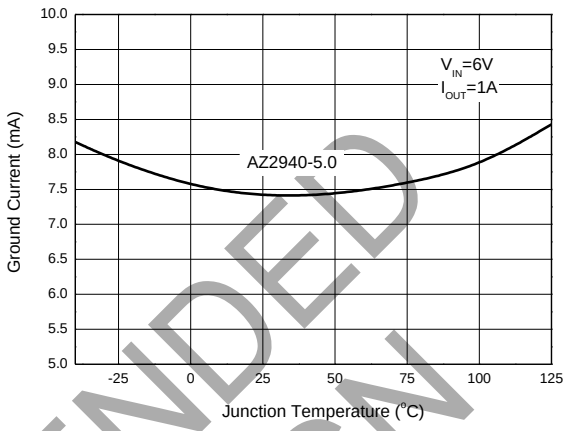


Performance Characteristics (Cont.)

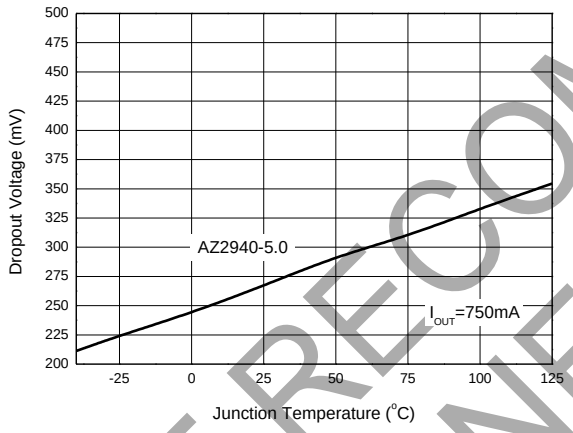
Ground Current vs. Junction Temperature



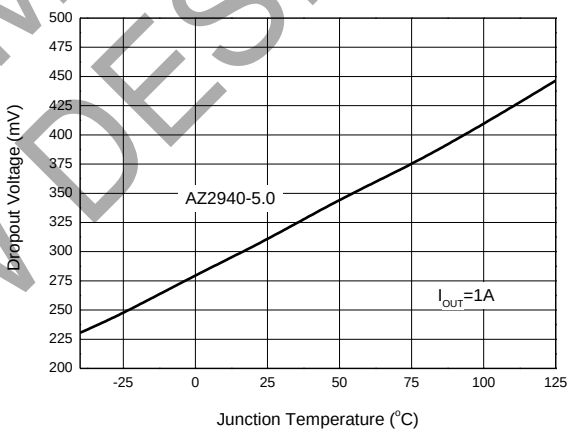
Ground Current vs. Junction Temperature



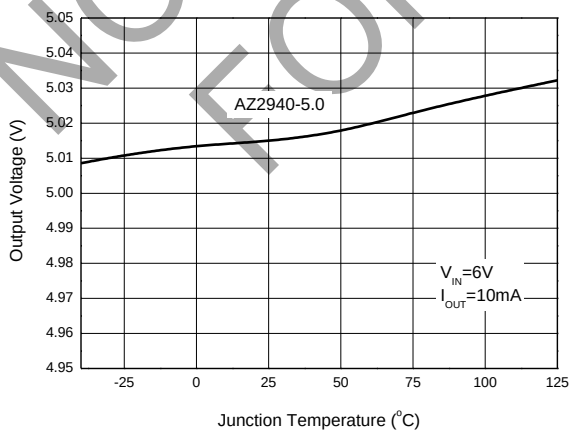
Dropout Voltage vs. Junction Temperature



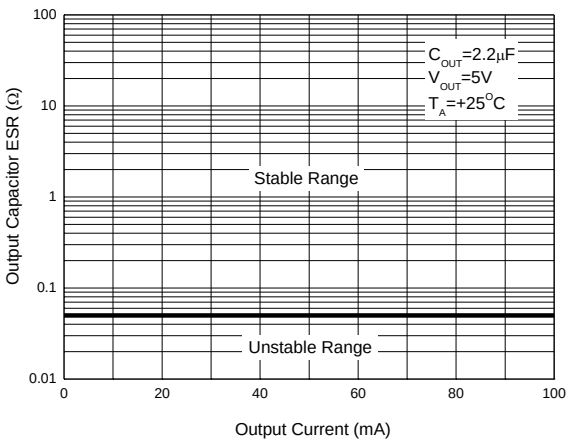
Dropout Voltage vs. Junction Temperature



Output Voltage vs. Junction Temperature

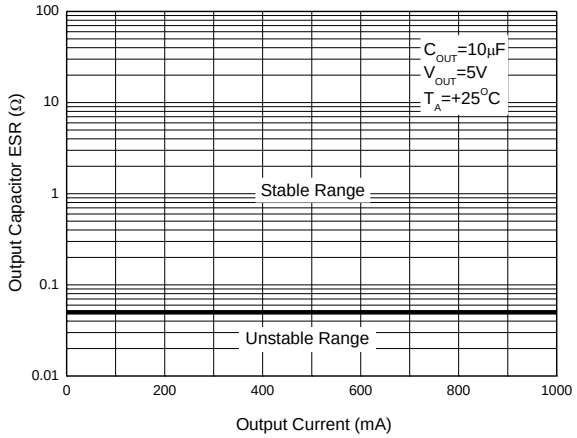


Output Capacitor ESR vs. Output Current

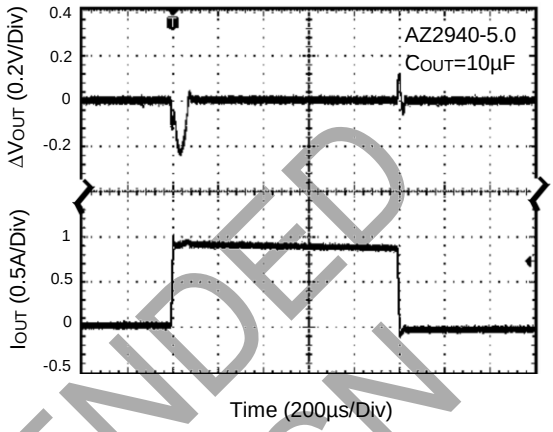


Performance Characteristics (Cont.)

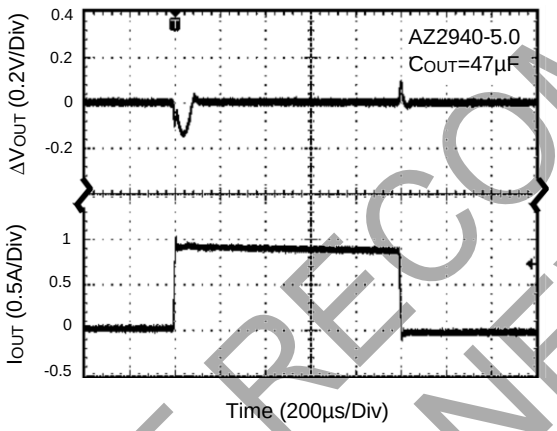
Output Capacitor ESR vs. Output Current



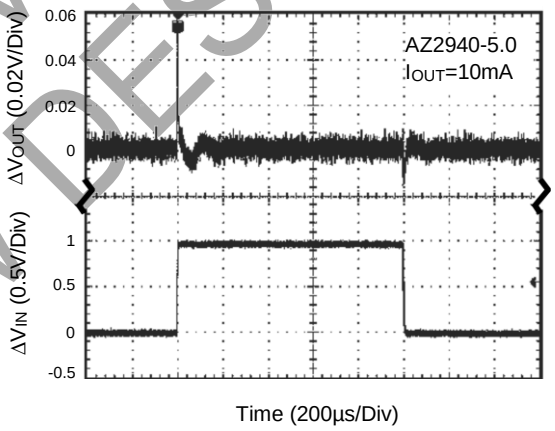
Load Transient



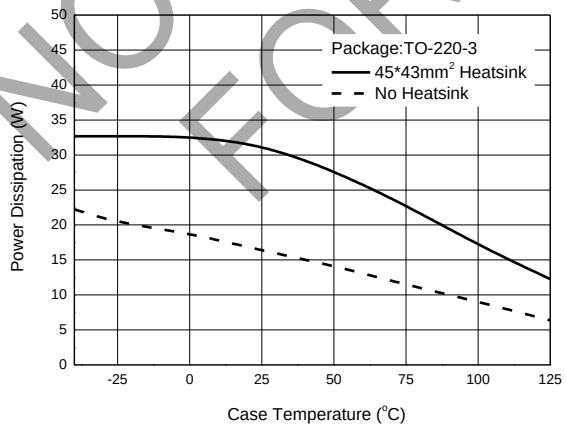
Load Transient



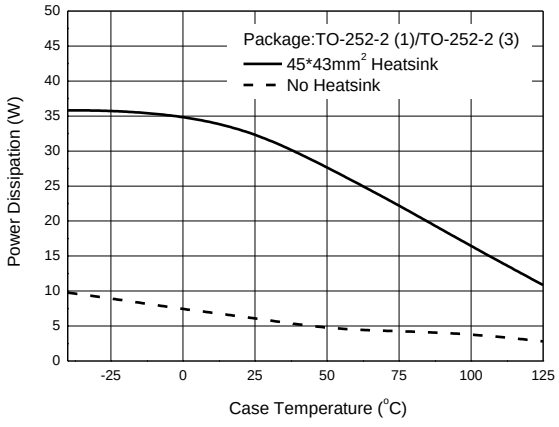
Line Transient



Power Dissipation vs. Case Temperature

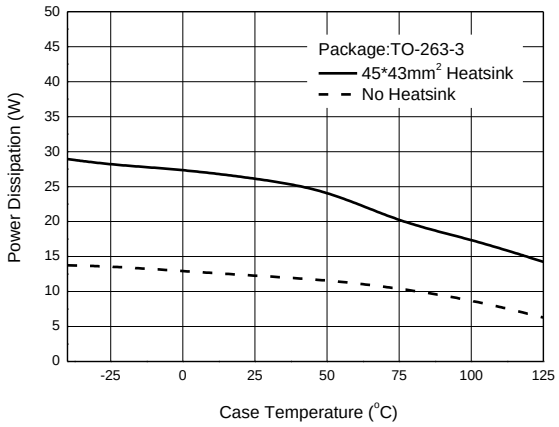


Power Dissipation vs. Case Temperature

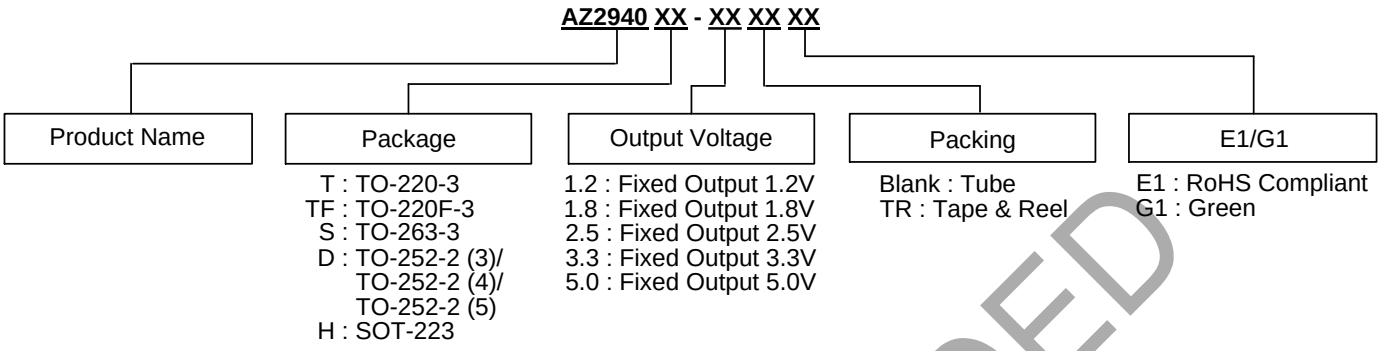


Performance Characteristics (Cont.)

Power Dissipation vs. Case Temperature



Ordering Information



Package	Temperature Range	Part Number		Marking ID		Packing
		RoHS Compliant	Green	RoHS Compliant	Green	
TO-220-3	-40 to +125°C	AZ2940T-3.3E1	AZ2940T-3.3G1	AZ2940T-3.3E1	AZ2940T-3.3G1	1000/Tube
		AZ2940T-5.0E1	AZ2940T-5.0G1	AZ2940T-5.0E1	AZ2940T-5.0G1	1000/Tube
TO-220F-3	-40 to +125°C	–	AZ2940TF-5.0G1	–	AZ2940TF-5.0G1	1000/Tube
TO-263-3	-40 to +125°C	AZ2940S-3.3E1	AZ2940S-3.3G1	AZ2940S-3.3E1	AZ2940S-3.3G1	1000/Tube
		AZ2940S-3.3TRE1	AZ2940S-3.3TRG1	AZ2940S-3.3E1	AZ2940S-3.3G1	2500/Tape & Reel
		AZ2940S-5.0E1	AZ2940S-5.0G1	AZ2940S-5.0E1	AZ2940S-5.0G1	1000/Tube
		AZ2940S-5.0TRE1	AZ2940S-5.0TRG1	AZ2940S-5.0E1	AZ2940S-5.0G1	2500/Tape & Reel
TO-252-2 (3)/ TO-252-2 (4)/ TO-252-2(5)	-40 to +125°C	–	AZ2940D-1.2G1	–	AZ2940D-1.2G1	1000/Tube
		–	AZ2940D-1.2TRG1	–	AZ2940D-1.2G1	2500/Tape & Reel
		AZ2940D-1.8E1	AZ2940D-1.8G1	AZ2940D-1.8E1	AZ2940D-1.8G1	1000/Tube
		AZ2940D-1.8TRE1	AZ2940D-1.8TRG1	AZ2940D-1.8E1	AZ2940D-1.8G1	2500/Tape & Reel
		AZ2940D-2.5E1	AZ2940D-2.5G1	AZ2940D-2.5E1	AZ2940D-2.5G1	1000/Tube
		AZ2940D-2.5TRE1	AZ2940D-2.5TRG1	AZ2940D-2.5E1	AZ2940D-2.5G1	2500/Tape & Reel
		AZ2940D-3.3E1	AZ2940D-3.3G1	AZ2940D-3.3E1	AZ2940D-3.3G1	1000/Tube
		AZ2940D-3.3TRE1	AZ2940D-3.3TRG1	AZ2940D-3.3E1	AZ2940D-3.3G1	2500/Tape & Reel
		AZ2940D-5.0E1	AZ2940D-5.0G1	AZ2940D-5.0E1	AZ2940D-5.0G1	1000/Tube
		AZ2940D-5.0TRE1	AZ2940D-5.0TRG1	AZ2940D-5.0E1	AZ2940D-5.0G1	2500/Tape & Reel

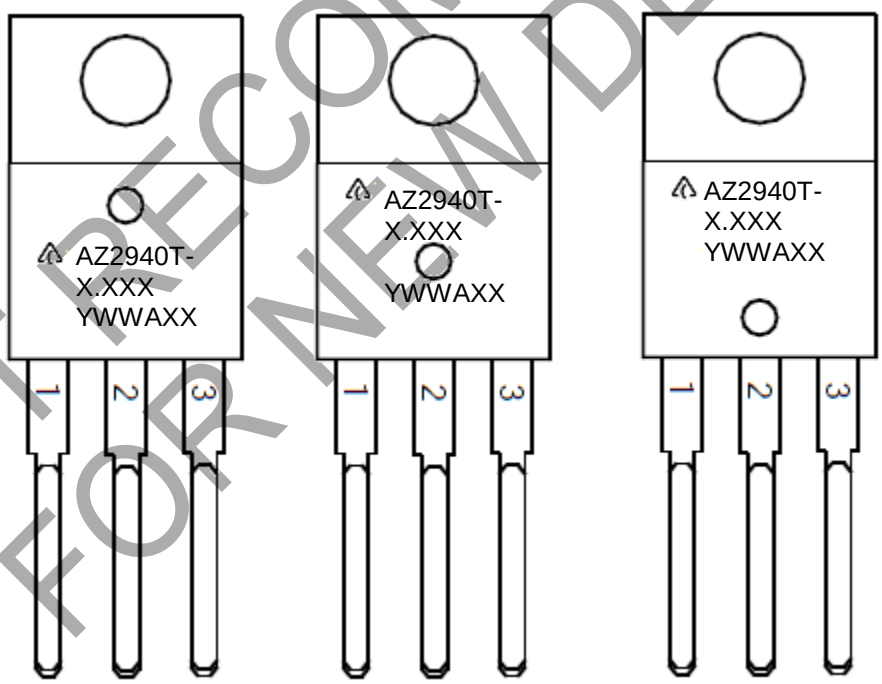
Ordering Information (Cont.)

Package	Temperature Range	Part Number		Marking ID		Packing
		RoHS Compliant	Green	RoHS Compliant	Green	
SOT-223	-40 to +125°C	–	AZ2940H-1.2TRG1	–	GH12B	2500/Tape & Reel
		–	AZ2940H-1.8TRG1	–	GH12F	2500/Tape & Reel
		–	AZ2940H-2.5TRG1	–	GH12G	2500/Tape & Reel
		–	AZ2940H-3.3TRG1	–	GH12H	2500/Tape & Reel
		–	AZ2940H-5.0TRG1	–	GH12J	2500/Tape & Reel

Marking Information

(1) TO-220-3

(Front View)

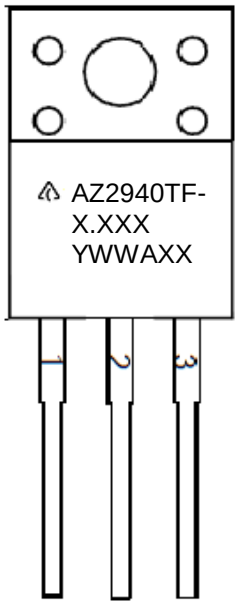


First and Second Lines: Logo and Marking ID
(See Ordering Information)
Third Line: Date Code
Y: Year
WW: Work Week of Molding
A: Assembly House Code
XX: Internal Code

Marking Information (Cont.)

(2) TO-220F-3

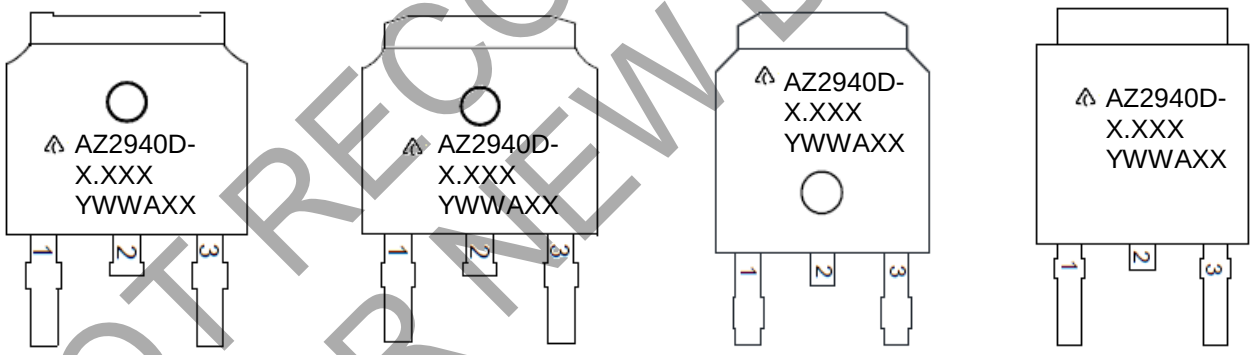
(Front View)



First and Second Lines: Logo and Marking ID
(See Ordering Information)
Third Line: Date Code
Y: Year
WW: Work Week of Molding
A: Assembly House Code
XX: Internal Code

(3) TO-252-2(3)/(4)/(5)

(Top View)

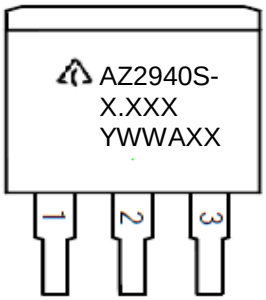


First and Second Lines: Logo and Marking ID
(See Ordering Information)
Third Line: Date Code
Y: Year
WW: Work Week of Molding
A: Assembly House Code
XX: Internal Code

Marking Information (Cont.)

(4) TO-263-3

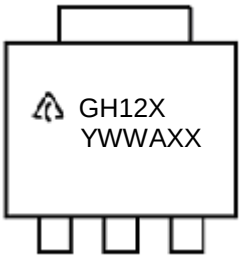
(Top View)



First and Second Lines: Logo and Marking ID
(See Ordering Information)
Third Line: Date Code
Y: Year
WW: Work Week of Molding
A: Assembly House Code
XX: Internal Code

(5) SOT-223

(Top View)

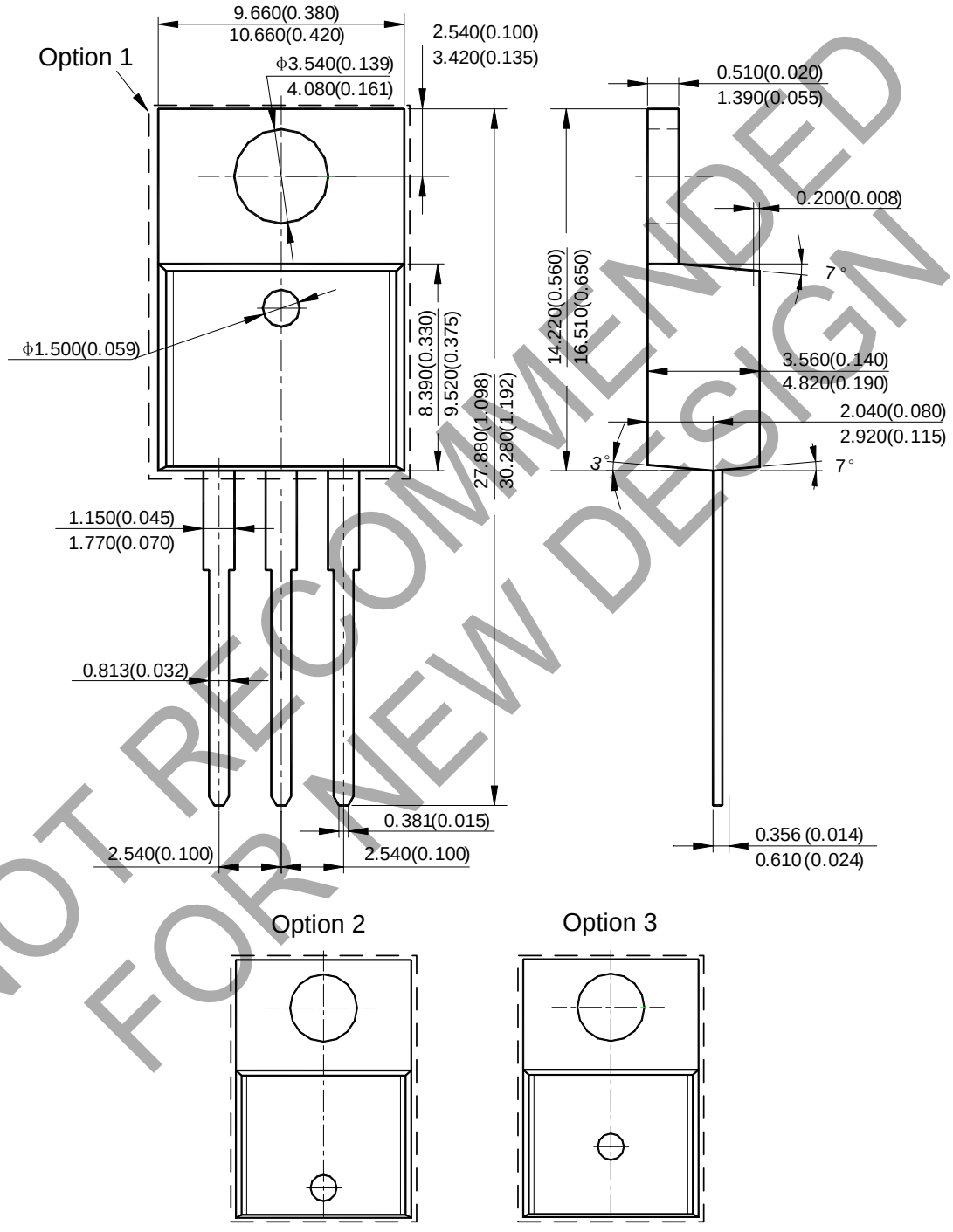


First Line: Logo and Marking ID
(See Ordering Information)
Second Line: Date Code
Y: Year
WW: Work Week of Molding
A: Assembly House Code
XX: Internal Code

Package Outline Dimensions (All dimensions in mm(inch).)

Please see http://www.diodes.com/package-outlines.html for the latest version.

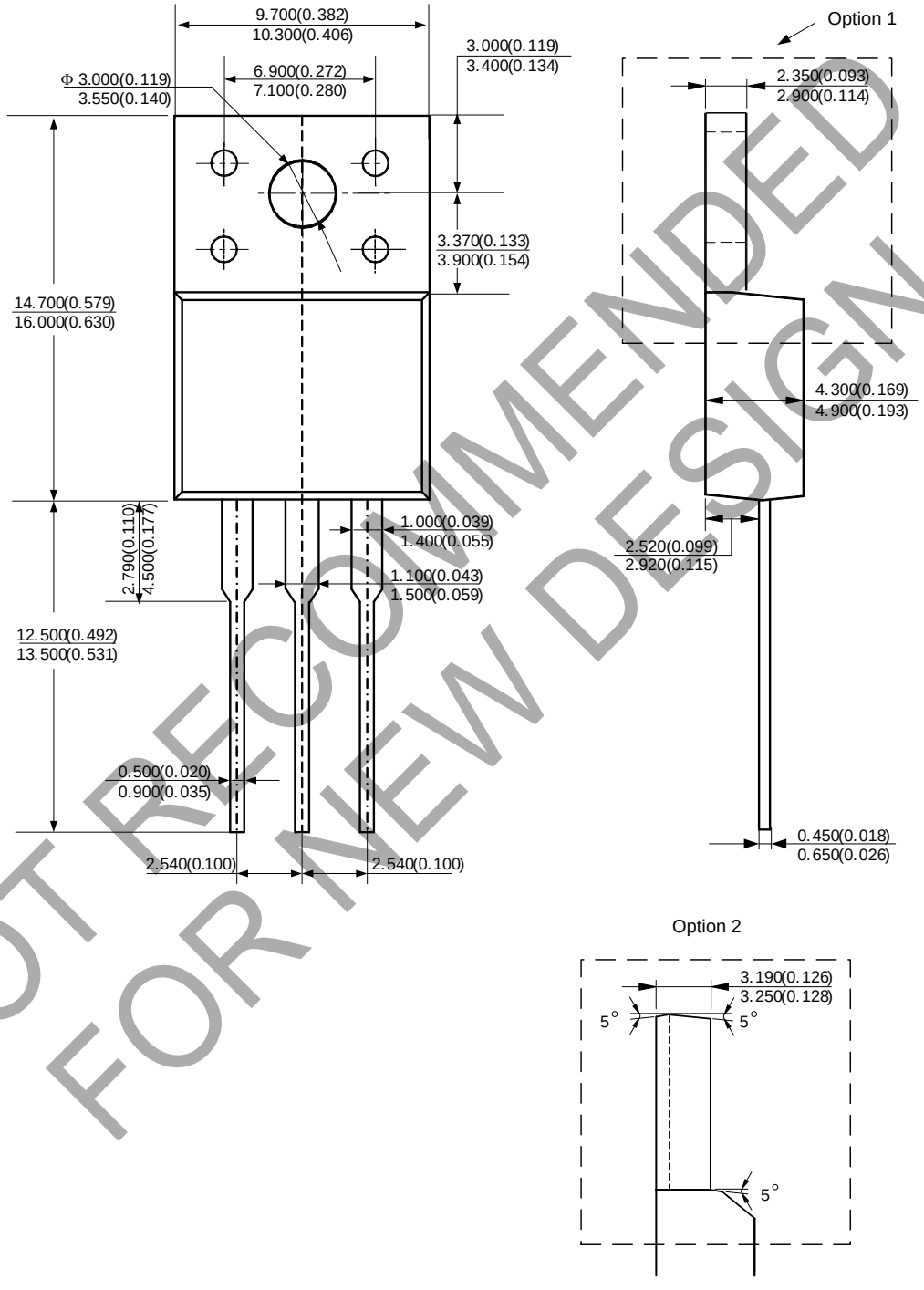
(1) Package Type: TO-220-3



Package Outline Dimensions (Cont. All dimensions in mm(inch).)

Please see http://www.diodes.com/package-outlines.html for the latest version.

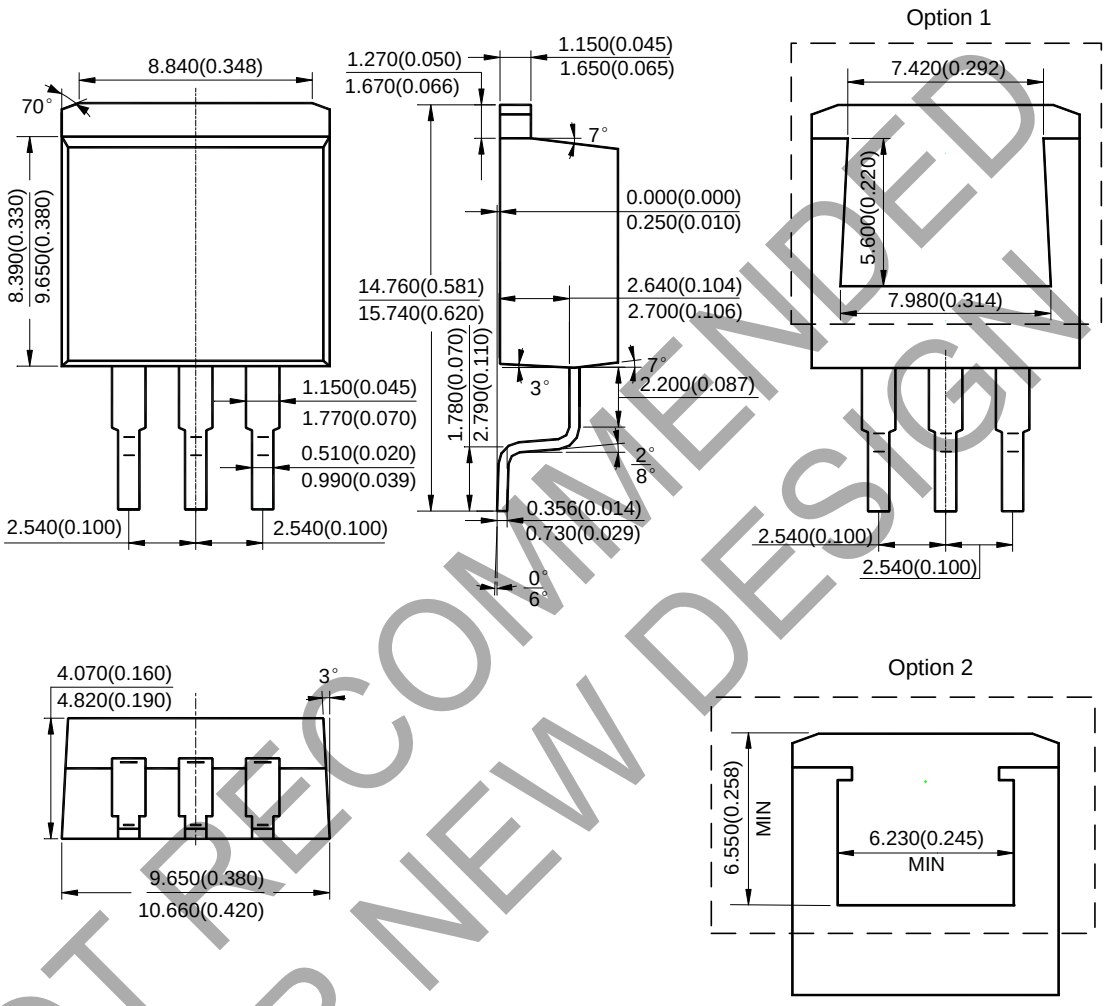
(2) Package Type: TO-220F-3



Package Outline Dimensions (Cont. All dimensions in mm(inch).)

Please see http://www.diodes.com/package-outlines.html for the latest version.

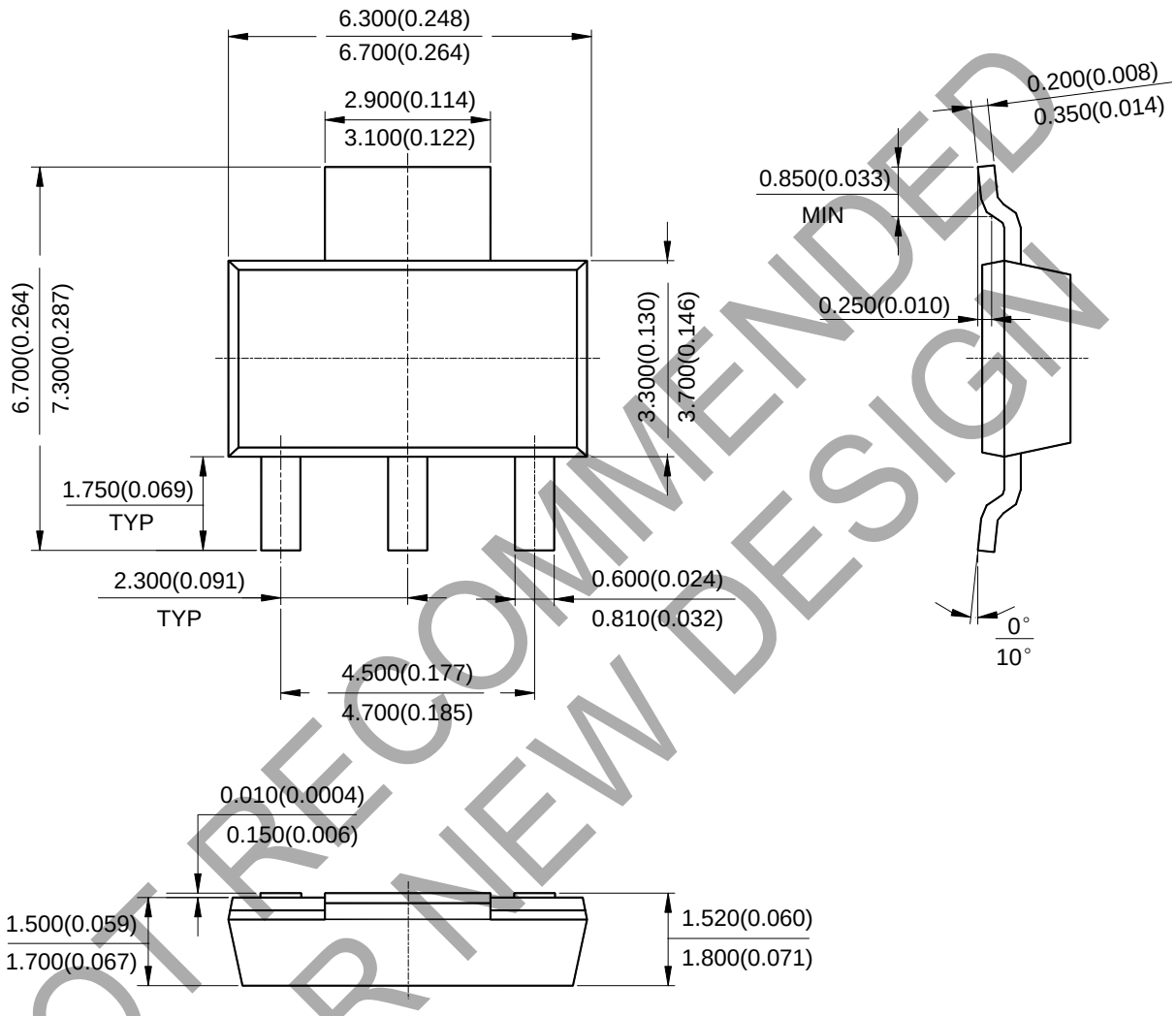
(3) Package Type: TO-263-3



Package Outline Dimensions (Cont. All dimensions in mm(inch).)

Please see http://www.diodes.com/package-outlines.html for the latest version.

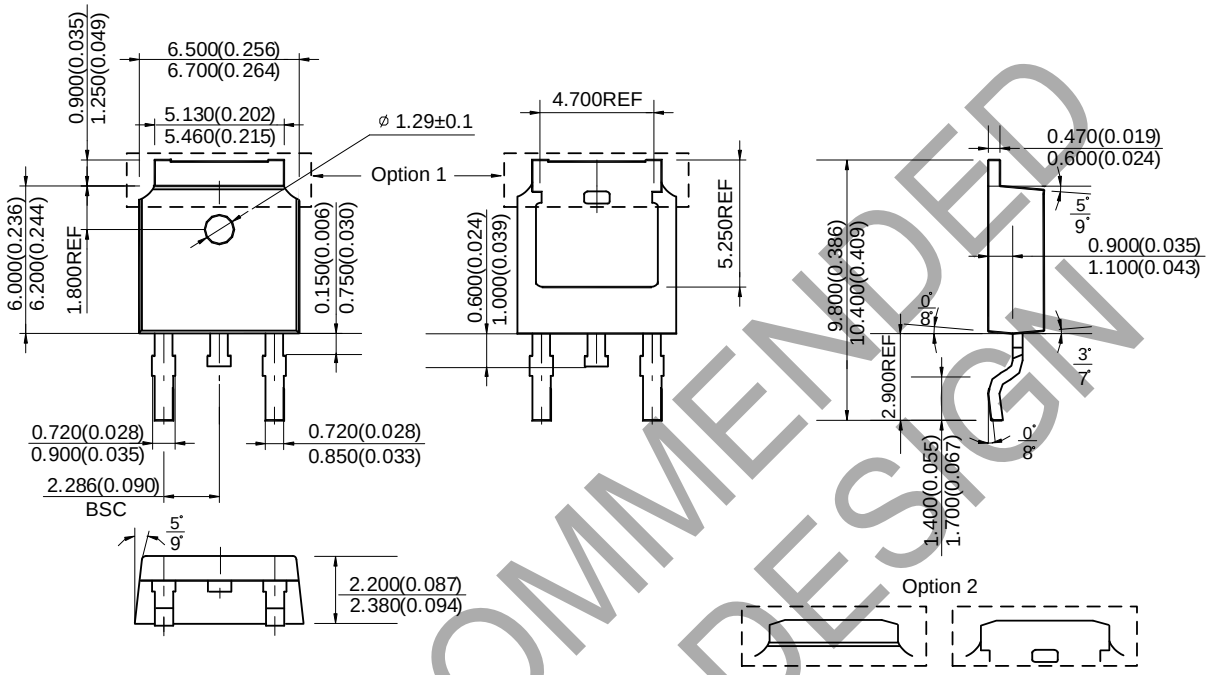
(4) Package Type: SOT-223



Package Outline Dimensions (Cont. All dimensions in mm(inch).)

Please see http://www.diodes.com/package-outlines.html for the latest version.

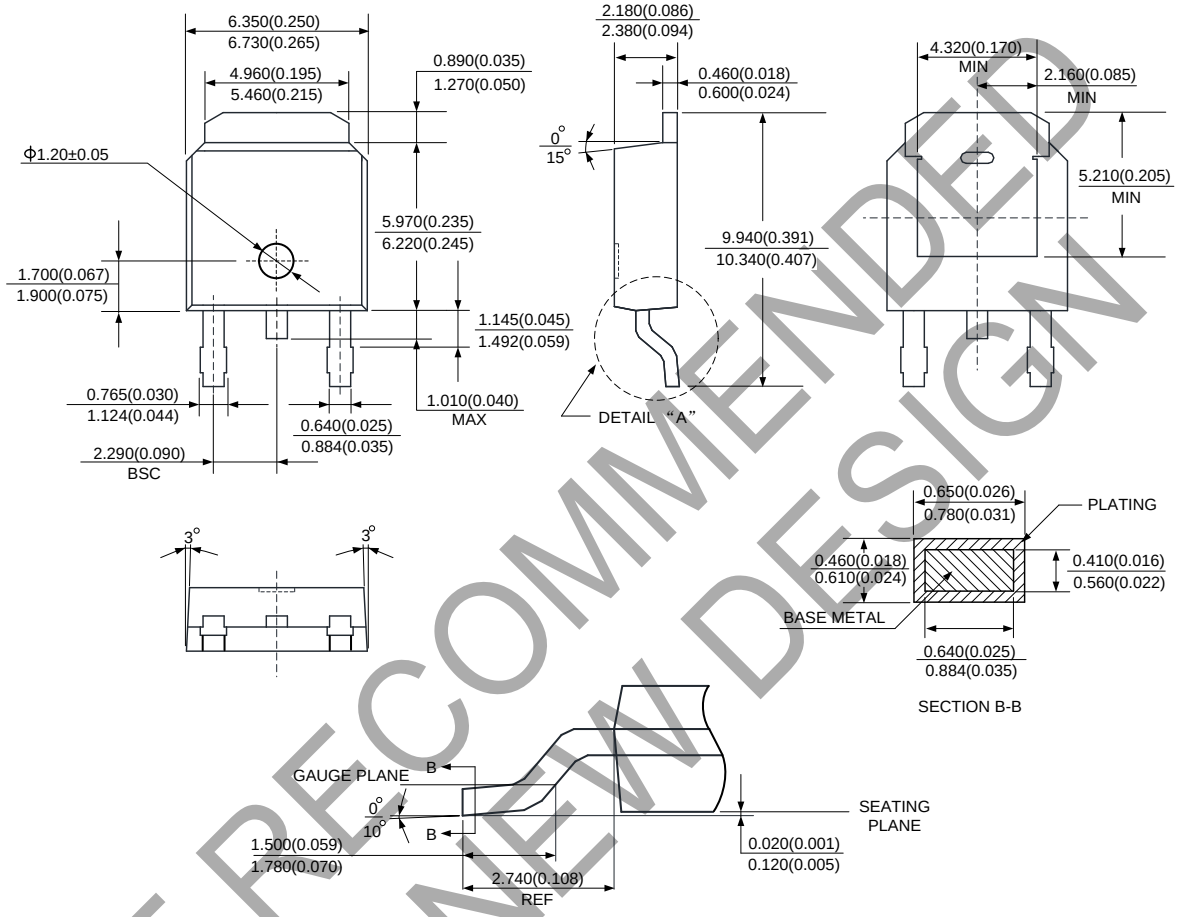
(5) Package Type: TO-252-2 (3)



Package Outline Dimensions (Cont. All dimensions in mm(inch).)

Please see http://www.diodes.com/package-outlines.html for the latest version.

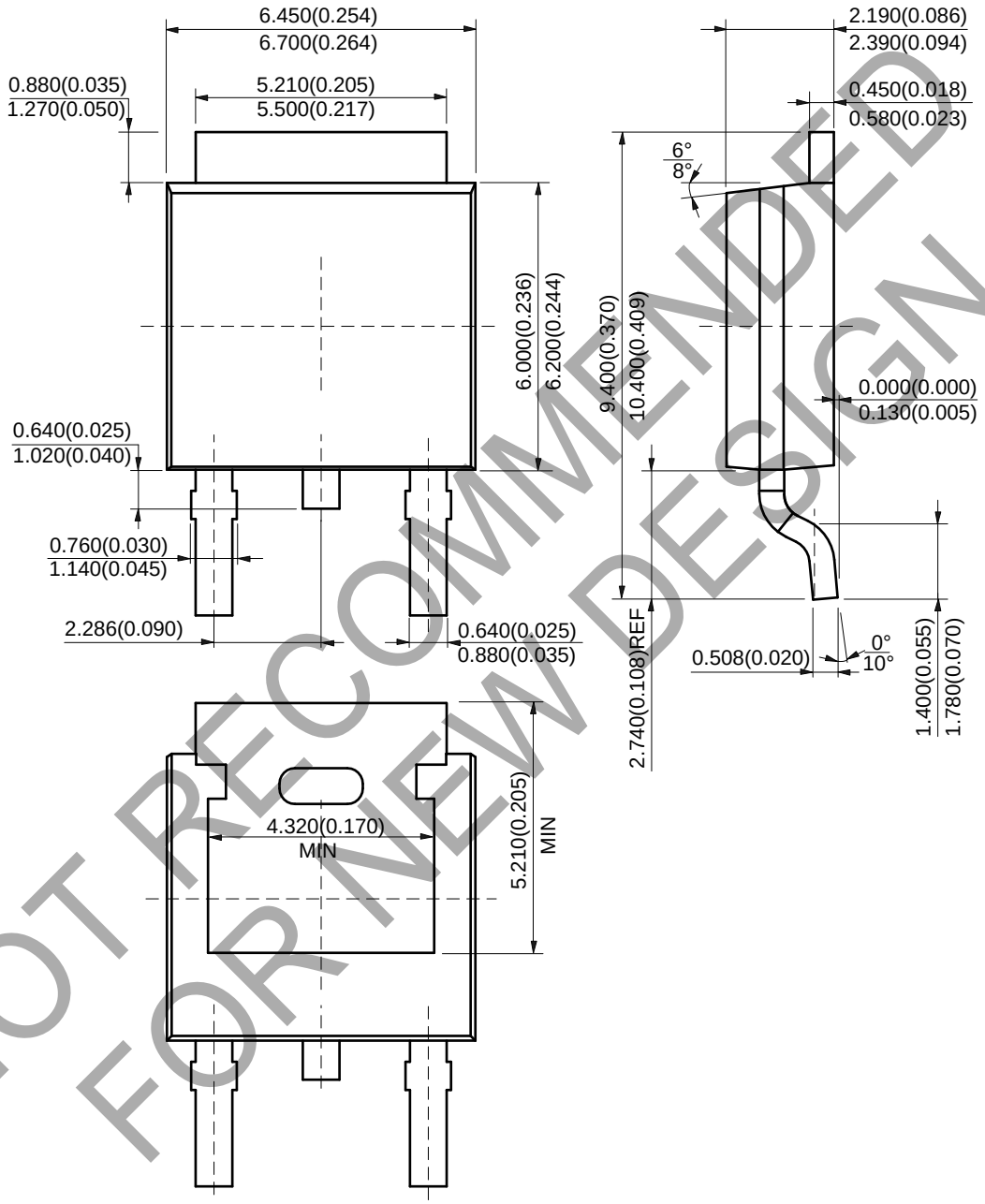
(6) Package Type: TO-252-2 (4)



Package Outline Dimensions (Cont. All dimensions in mm(inch).)

Please see http://www.diodes.com/package-outlines.html for the latest version.

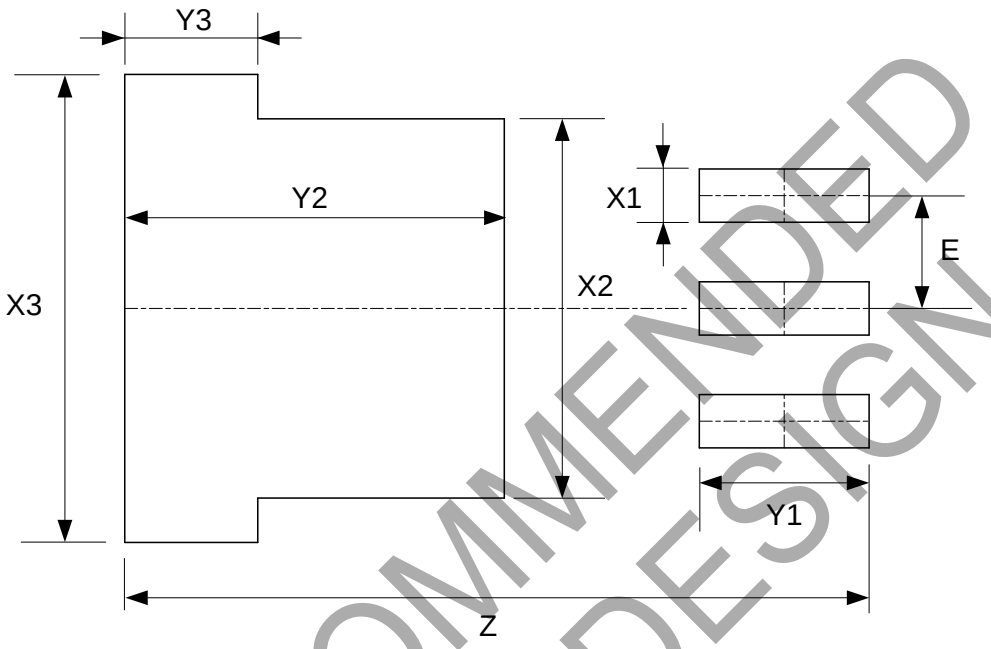
(7) Package Type: TO-252-2 (5)



Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

(1) Package Type: TO-263-3

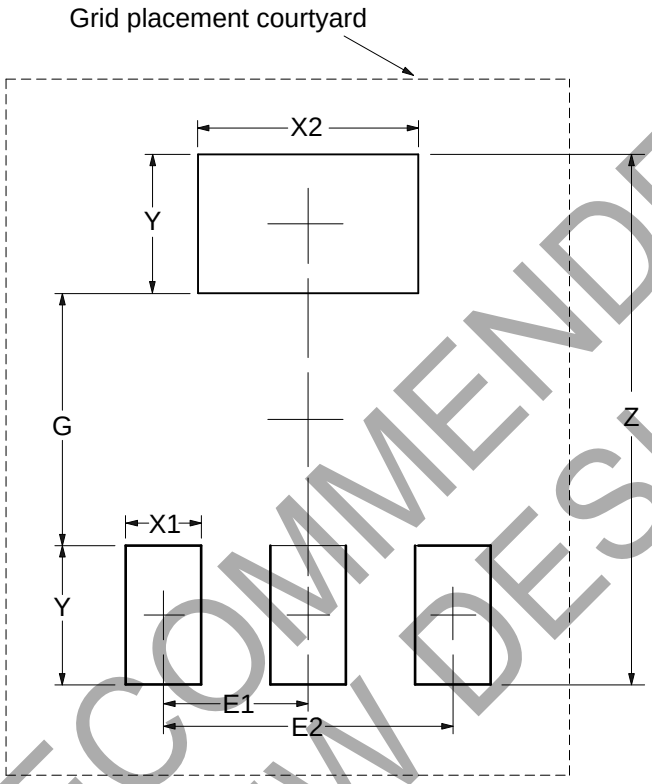


Dimensions	Z (mm)/(inch)	X1 (mm)/(inch)	X2 (mm)/(inch)	X3 (mm)/(inch)
Value	16.760/0.660	1.200/0.047	8.540/0.336	10.540/0.415
Dimensions	Y1 (mm)/(inch)	Y2 (mm)/(inch)	Y3 (mm)/(inch)	E (mm)/(inch)
Value	3.830/0.151	8.560/0.337	3.000/0.118	2.540/0.100

Suggested Pad Layout (Cont.)

Please see http://www.diodes.com/package-outlines.html for the latest version.

(2) Package Type: SOT-223

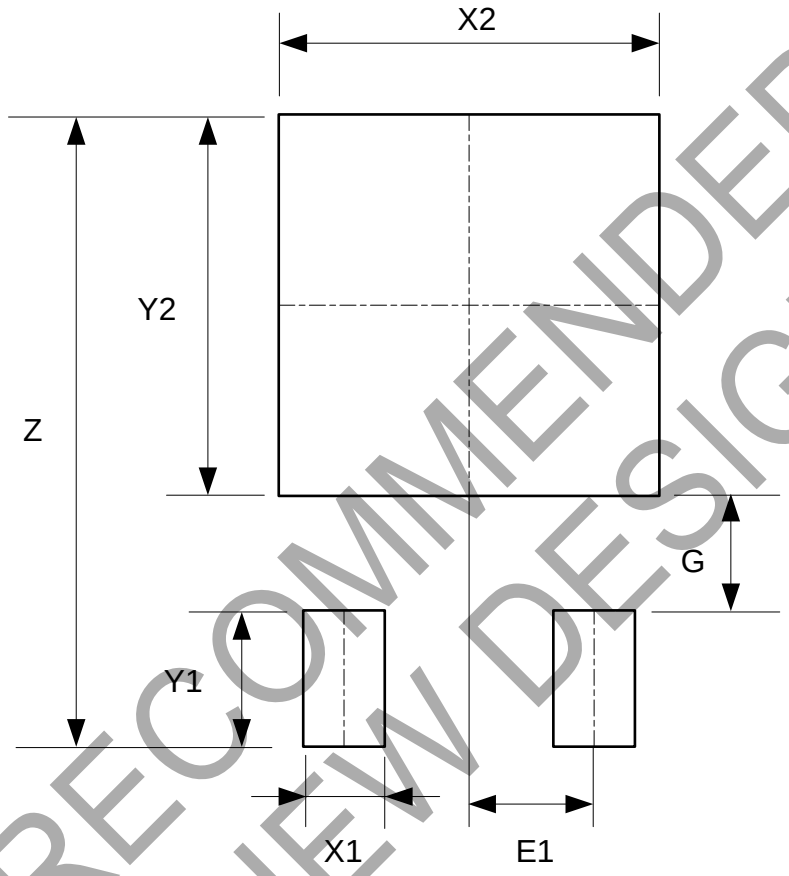


Dimensions	Z (mm)/(inch)	G (mm)/(inch)	X1 (mm)/(inch)	X2 (mm)/(inch)	Y (mm)/(inch)	E1 (mm)/(inch)	E2 (mm)/(inch)
Value	8.400/0.331	4.000/0.157	1.200/0.047	3.500/0.138	2.200/0.087	2.300/0.091	4.600/0.181

Suggested Pad Layout (Cont.)

Please see http://www.diodes.com/package-outlines.html for the latest version.

(3) Package Type: TO-252-2 (3)

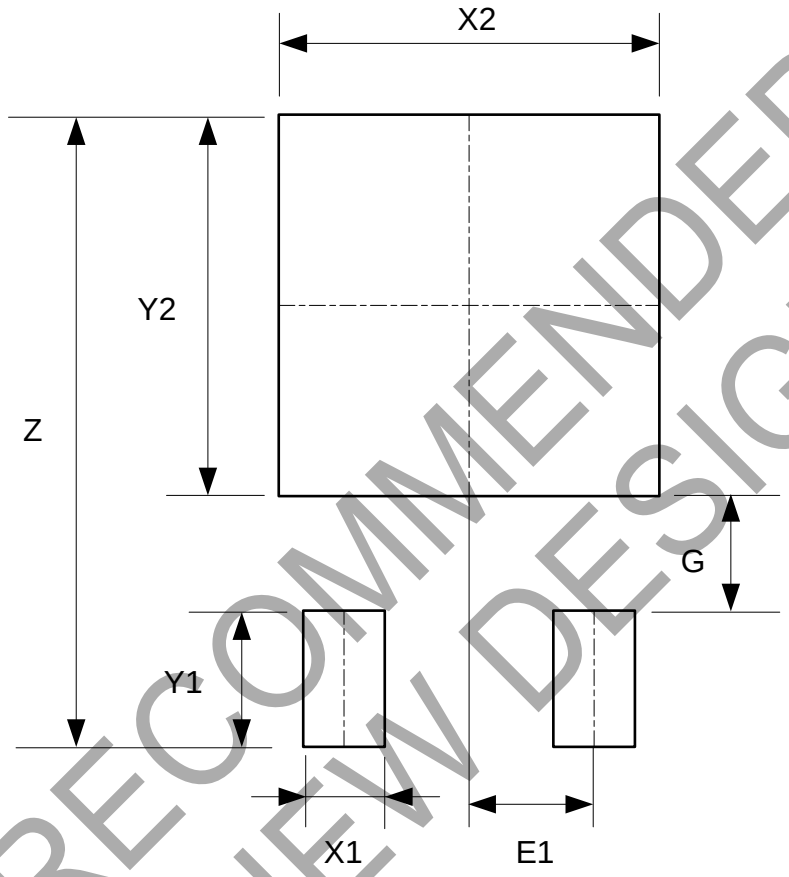


Dimensions	Z (mm)/(inch)	X1 (mm)/(inch)	X2=Y2 (mm)/(inch)	Y1 (mm)/(inch)	G (mm)/(inch)	E1 (mm)/(inch)
Value	11.600/0.457	1.500/0.059	7.000/0.276	2.500/0.098	2.100/0.083	2.300/0.091

Suggested Pad Layout (Cont.)

Please see http://www.diodes.com/package-outlines.html for the latest version.

(4) Package Type: TO-252-2 (4)

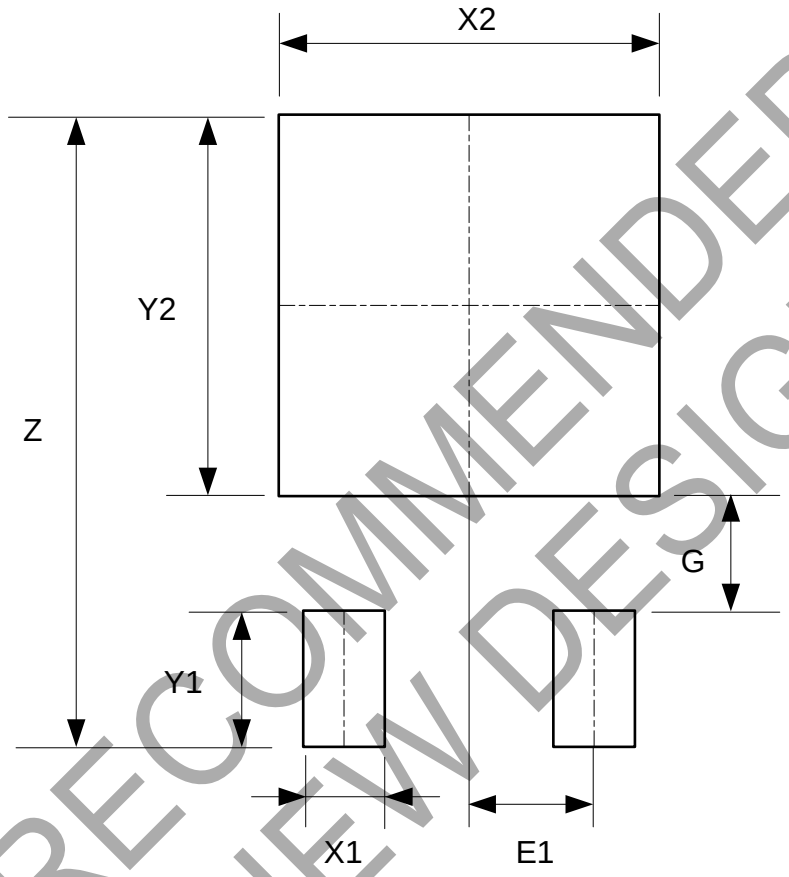


Dimensions	Z (mm)/(inch)	X1 (mm)/(inch)	X2=Y2 (mm)/(inch)	Y1 (mm)/(inch)	G (mm)/(inch)	E1 (mm)/(inch)
Value	11.600/0.457	1.500/0.059	7.000/0.276	2.500/0.098	2.100/0.083	2.300/0.091

Suggested Pad Layout (Cont.)

Please see http://www.diodes.com/package-outlines.html for the latest version.

(5) Package Type: TO-252-2 (5)



Dimensions	Z (mm)/(inch)	X1 (mm)/(inch)	X2=Y2 (mm)/(inch)	Y1 (mm)/(inch)	G (mm)/(inch)	E1 (mm)/(inch)
Value	11.600/0.457	1.500/0.059	7.000/0.276	2.500/0.098	2.100/0.083	2.300/0.091

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