



**THE DATASHEET OF  
AZ2940H-5.0TRG1**



**1A ULTRA LOW DROPOUT LINEAR REGULATOR**

**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.

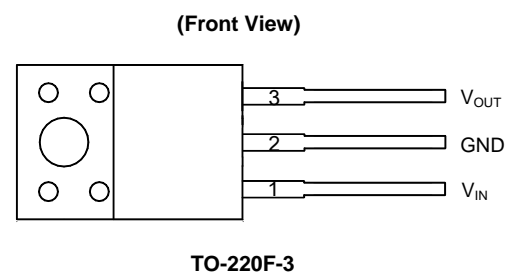
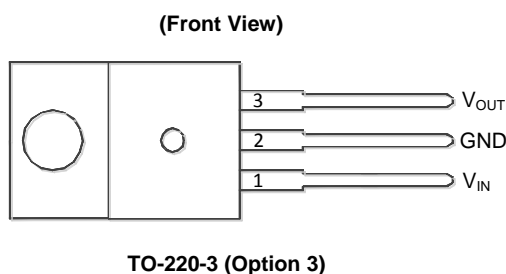
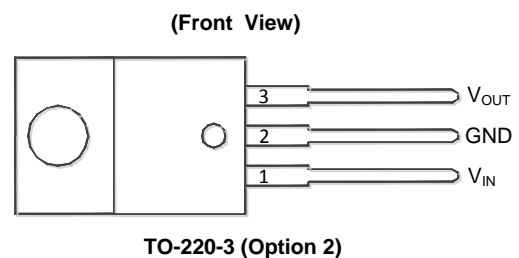
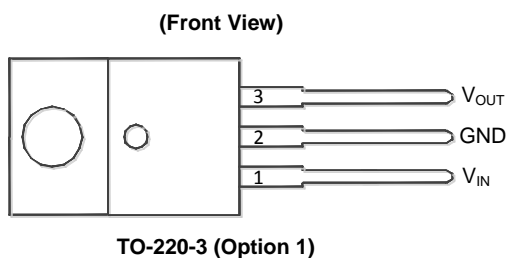
The AZ2940 series is available in the industry standard TO-220-3, TO-220F-3, TO-263-3, TO-252-2 (3), TO-252-2 (4), TO-252-2 (5) and SOT-223 power packages. (Detailed information please refer to pages 13, 14)

**Applications**

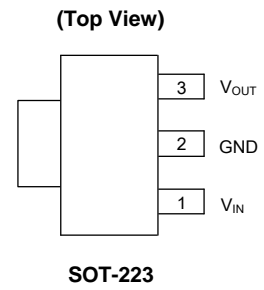
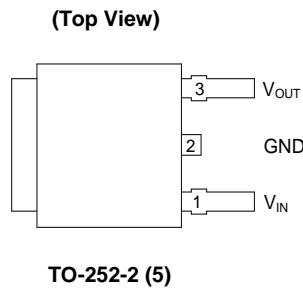
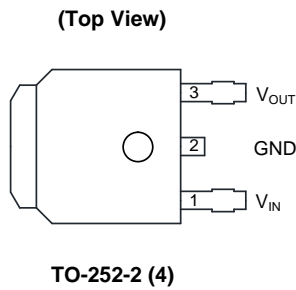
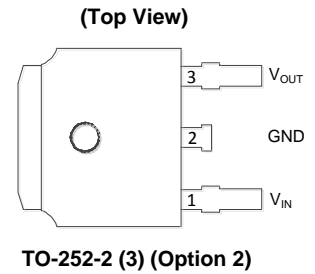
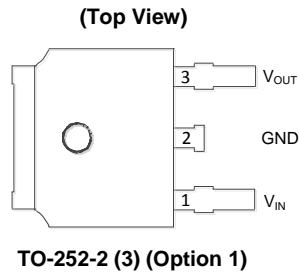
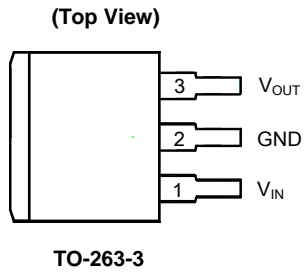
- LCD TV
- Set Top Box
- LCD Monitor
- SMPS Post Regulator
- Laptop, Palmtop and Notebook
- Portable Instrumentation
- USB Power Supply

- Notes:
1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. All applicable RoHS exemptions applied.
  2. See [http://www.diodes.com/quality/lead\\_free.html](http://www.diodes.com/quality/lead_free.html) 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.

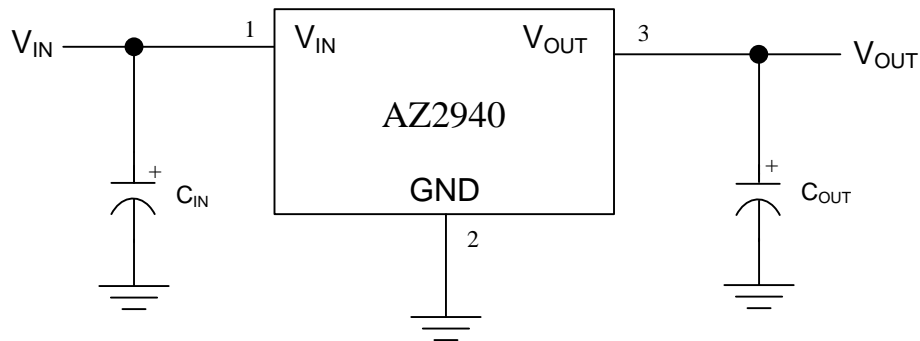
**Pin Assignments**



**Pin Assignments** (Cont.)



**Typical Applications Circuit** (Note 4)

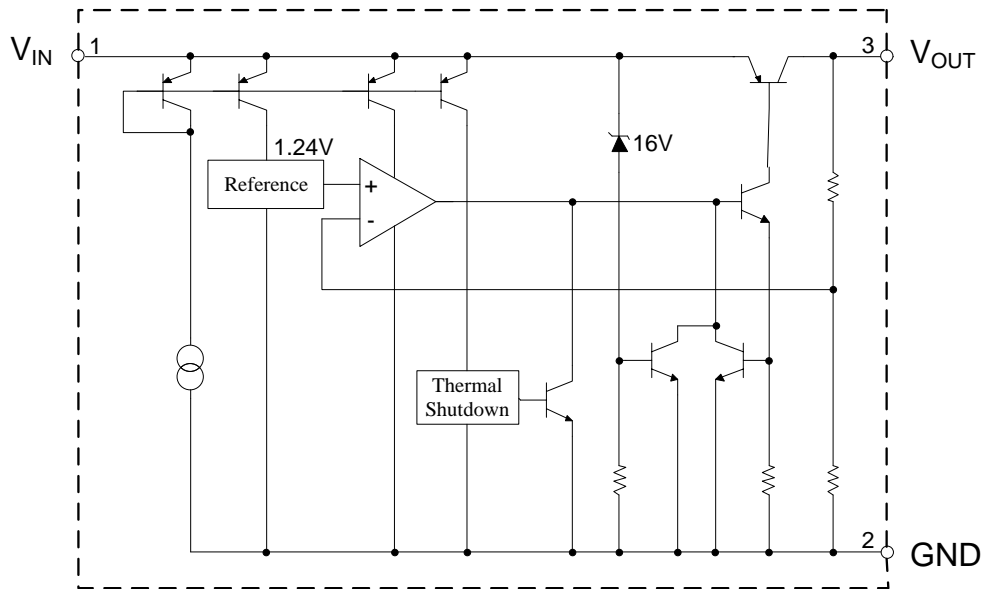


Note 4:  $C_{IN}$  is required if regulator is located far from power supply filter and is recommended to be  $0.47\mu\text{F}$  or greater. To maintain stability,  $C_{OUT}$  is recommended to be  $2.2\mu\text{F}$  or greater. The ESR of this capacitor is critical, please see curve.

**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 <sub>IN</sub>	Input Voltage	16		V
T <sub>J</sub>	Operating Junction Temperature	+150		°C
T <sub>STG</sub>	Storage Temperature Range	-65 to +150		°C
T <sub>LEAD</sub>	Lead Temperature (Soldering, 10sec)	+260		°C
θ <sub>JA</sub>	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” may 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 may affect device reliability.

**Recommended Operating Conditions**

Symbol	Parameter	Min	Max	Unit
V <sub>IN</sub>	Input Voltage	2.5	13.2	V
T <sub>J</sub>	Operating Junction Temperature	-40	+125	°C

## Electrical Characteristics

### AZ2940-1.2 Electrical Characteristics

(Operating Conditions:  $V_{IN} = 2.5V$ ,  $I_{OUT} = 10mA$ ,  $C_{IN} = 10\mu F$ ,  $C_{OUT} = 10\mu F$ ,  $T_J = +25^\circ C$ , unless otherwise specified. The **Boldface** applies over  $-40^\circ C$  to  $+125^\circ C$ )

Symbol	Parameter	Condition	Min	Typ	Max	Unit	
$V_{OUT}$	Output Voltage	$I_{OUT} = 10mA$	1.188	1.2	1.212	V	
		$10mA \leq I_{OUT} \leq 1A$ , $2.5V \leq V_{IN} \leq 13.2V$	<b>1.176</b>	<b>1.2</b>	<b>1.224</b>	V	
$V_{RLINE}$	Line Regulation	$I_{OUT} = 10mA$ , $2.5V \leq V_{IN} \leq 13.2V$	–	3.6	18	mV	
$V_{RLOAD}$	Load Regulation	$V_{IN} = 2.5V$ , $10mA \leq I_{OUT} \leq 1A$	–	5.4	27	mV	
$\Delta V_{OUT}/\Delta T$	Output Voltage Temperature Coefficient	$I_{OUT} = 10mA$	–	–	<b>180</b>	$\mu V/^\circ C$	
$I_{GND}$	Ground Current	$V_{IN} = 2.5V$	$I_{OUT} = 750mA$	–	12	<b>25</b>	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, $I_{OUT} = 100mA$ , $C_{OUT} = 10\mu F$	–	400	–	$\mu V$	
$\theta_{JC}$	Thermal Resistance	TO-252-2 (3)/(4)/(5)	–	7.8	–	$^\circ C/W$	
		SOT-223	–	29.7	–		

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

**Electrical Characteristics** (Cont.)

**AZ2940-1.8 Electrical Characteristics**

(Operating Conditions:  $V_{IN} = 2.8V$ ,  $I_{OUT} = 10mA$ ,  $C_{IN} = 10\mu F$ ,  $C_{OUT} = 10\mu F$ ,  $T_J = +25^\circ C$ , unless otherwise specified. The **Boldface** applies over  $-40^\circ C$  to  $+125^\circ C$ )

Symbol	Parameter	Condition	Min	Typ	Max	Unit	
$V_{OUT}$	Output Voltage	$I_{OUT} = 10mA$	1.782	1.8	1.818	V	
		$10mA \leq I_{OUT} \leq 1A$ , $2.8V \leq V_{IN} \leq 13.2V$	<b>1.764</b>	<b>1.8</b>	<b>1.836</b>	V	
$V_{RLINE}$	Line Regulation	$I_{OUT} = 10mA$ , $2.8V \leq V_{IN} \leq 13.2V$	–	3.6	18	mV	
$V_{RLOAD}$	Load Regulation	$V_{IN} = 2.8V$ , $10mA \leq I_{OUT} \leq 1A$	–	5.4	27	mV	
$\Delta V_{OUT}/\Delta T$	Output Voltage Temperature Coefficient	$I_{OUT} = 10mA$	–	<b>36</b>	<b>180</b>	$\mu V/^\circ C$	
$V_{DROP}$	Dropout Voltage (Note 7)	$\Delta V_{OUT} = 1\%$	$I_{OUT} = 100mA$	–	290	<b>500</b>	mV
			$I_{OUT} = 1A$	–	330	<b>750</b>	mV
$I_{GND}$	Ground Current	$V_{IN} = 2.8V$	$I_{OUT} = 750mA$	–	12	<b>25</b>	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, $I_{OUT} = 100mA$ , $C_{OUT} = 10\mu F$	–	400	–	$\mu V$	
$\theta_{JC}$	Thermal Resistance	TO-252-2 (3)/(4)/(5)	–	7.8	–	$^\circ C/W$	
		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:  $V_{IN} = 3.5V$ ,  $I_{OUT} = 10mA$ ,  $C_{IN} = 10\mu F$ ,  $C_{OUT} = 10\mu F$ ,  $T_J = +25^\circ C$ , unless otherwise specified. The **Boldface** applies over  $-40^\circ C$  to  $+125^\circ C$ )

Symbol	Parameter	Condition	Min	Typ	Max	Unit	
$V_{OUT}$	Output Voltage	$I_{OUT} = 10mA$	2.475	2.5	2.525	V	
		$10mA \leq I_{OUT} \leq 1A$ , $3.5V \leq V_{IN} \leq 13.2V$	<b>2.45</b>	<b>2.5</b>	<b>2.55</b>	V	
$V_{RLINE}$	Line Regulation	$I_{OUT} = 10mA$ , $3.5V \leq V_{IN} \leq 13.2V$	–	5.0	25	mV	
$V_{RLOAD}$	Load Regulation	$V_{IN} = 3.5V$ , $10mA \leq I_{OUT} \leq 1A$	–	7.5	37.5	mV	
$\Delta V_{OUT}/\Delta T$	Output Voltage Temperature Coefficient	$I_{OUT} = 10mA$	–	<b>50</b>	<b>250</b>	$\mu V/^\circ C$	
$V_{DROP}$	Dropout Voltage (Note 8)	$\Delta V_{OUT} = 1\%$	$I_{OUT} = 100mA$	–	70	<b>200</b>	mV
			$I_{OUT} = 1A$	–	280	<b>550</b>	mV
$I_{GND}$	Ground Current	$V_{IN} = 3.5V$	$I_{OUT} = 750mA$	–	12	<b>25</b>	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, $I_{OUT} = 100mA$ , $C_{OUT} = 10\mu F$	–	400	–	$\mu V$	
$\theta_{JC}$	Thermal Resistance	TO-252-2 (3)/(4)/(5)	–	7.8	–	$^\circ C/W$	
		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:  $V_{IN} = 4.3V$ ,  $I_{OUT} = 10mA$ ,  $C_{IN} = 10\mu F$ ,  $C_{OUT} = 10\mu F$ ,  $T_J = +25^\circ C$ , unless otherwise specified. The **Boldface** applies over -40°C to +125°C)

Symbol	Parameter	Condition	Min	Typ	Max	Unit	
$V_{OUT}$	Output Voltage	$I_{OUT} = 10mA$	3.27	3.3	3.33	V	
		$10mA \leq I_{OUT} \leq 1A$ , $4.3V \leq V_{IN} \leq 13.2V$	<b>3.23</b>	<b>3.3</b>	<b>3.37</b>	V	
$V_{RLINE}$	Line Regulation	$I_{OUT} = 10mA$ , $4.3V \leq V_{IN} \leq 13.2V$	-	6.6	33	mV	
$V_{RLOAD}$	Load Regulation	$V_{IN} = 4.3V$ , $10mA \leq I_{OUT} \leq 1A$	-	9.9	50	mV	
$\Delta V_{OUT}/\Delta T$	Output Voltage Temperature Coefficient	$I_{OUT} = 10mA$	-	<b>66</b>	<b>330</b>	$\mu V/^\circ C$	
$V_{DROP}$	Dropout Voltage (Note 8)	$\Delta V_{OUT} = 1\%$	$I_{OUT} = 100mA$	-	70	<b>200</b>	mV
			$I_{OUT} = 1A$	-	280	<b>550</b>	mV
$I_{GND}$	Ground Current	$V_{IN} = 4.3V$	$I_{OUT} = 750mA$	-	12	<b>25</b>	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, $I_{OUT} = 100mA$ , $C_{OUT} = 10\mu F$	-	400	-	$\mu V$	
$\theta_{JC}$	Thermal Resistance	TO-220-3	-	4.4	-	$^\circ C/W$	
		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  $V_{IN}$ .

**Electrical Characteristics** (Cont.)

**AZ2940-5.0 Electrical Characteristics**

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

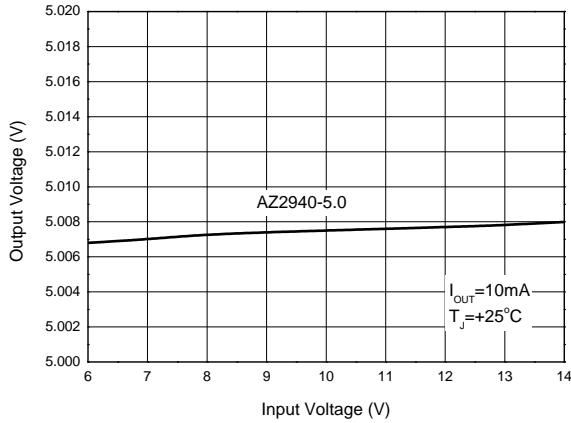
Symbol	Parameter	Condition	Min	Typ	Max	Unit	
$V_{OUT}$	Output Voltage	$I_{OUT} = 10mA$	4.95	5.0	5.05	V	
		$10mA \leq I_{OUT} \leq 1A$ , $6V \leq V_{IN} \leq 13.2V$	<b>4.90</b>	<b>5.0</b>	<b>5.10</b>	V	
$V_{RLINE}$	Line Regulation	$I_{OUT} = 10mA$ , $6V \leq V_{IN} \leq 13.2V$	–	10	50	mV	
$V_{RLOAD}$	Load Regulation	$V_{IN} = 6V$ , $10mA \leq I_{OUT} \leq 1A$	–	15	75	mV	
$\Delta V_{OUT}/\Delta T$	Output Voltage Temperature Coefficient	$I_{OUT} = 10mA$	–	<b>100</b>	<b>500</b>	$\mu V/^\circ C$	
$V_{DROP}$	Dropout Voltage (Note 8)	$\Delta V_{OUT} = 1\%$	$I_{OUT} = 100mA$	–	70	<b>200</b>	mV
			$I_{OUT} = 1A$	–	280	<b>550</b>	mV
$I_{GND}$	Ground Current	$V_{IN} = 6V$	$I_{OUT} = 750mA$	–	12	<b>25</b>	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, $I_{OUT} = 100mA$ , $C_{OUT} = 10\mu F$	–	400	–	$\mu V$	
$\theta_{JC}$	Thermal Resistance	TO-220-3/TO-220F-3	–	4.4	–	$^\circ C/W$	
		TO-263-3	–	4.4	–		
		TO-252-2 (3)/(4)/(5)	–	7.8	–		
		SOT-223	–	29.7	–		

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

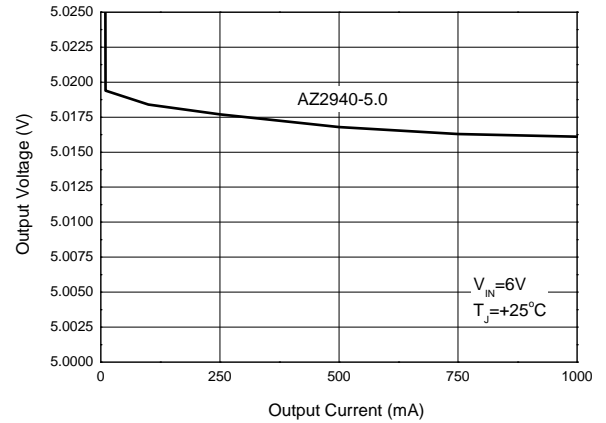
8. Dropout voltage is defined as the input-to-output differential when the output voltage drops to 99% of its nominal value which is measured at  $V_{OUT} + 1V$  applied to  $V_{IN}$ .

**Performance Characteristics**

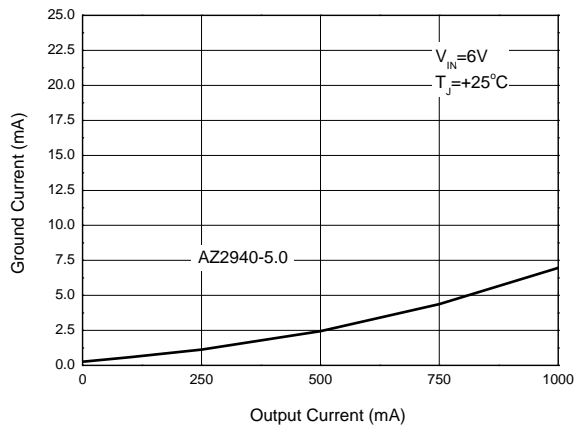
**Line Regulation**



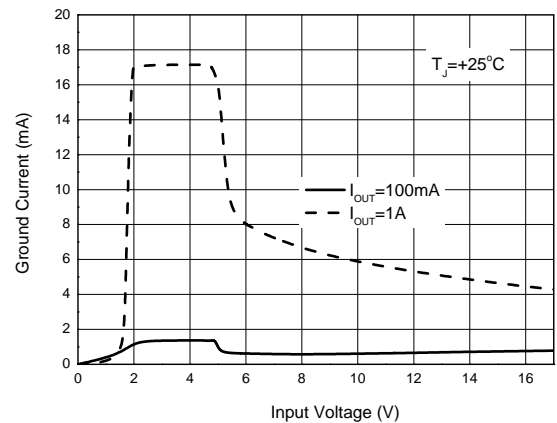
**Load Regulation**



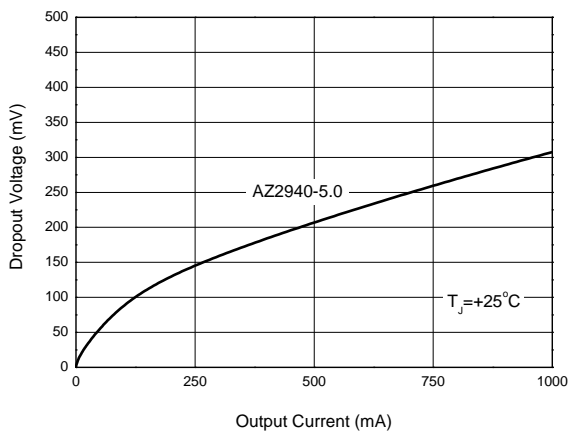
**Ground Current vs. Output Current**



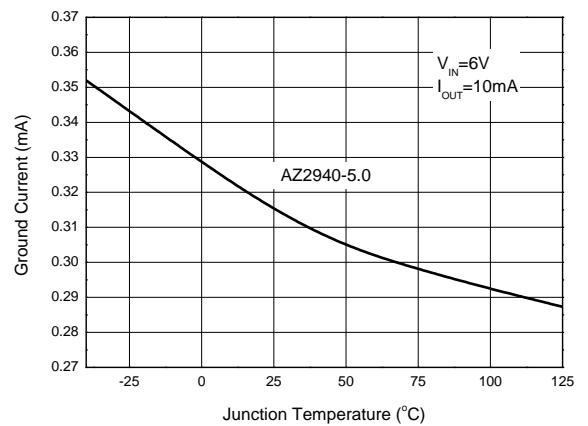
**Ground Current vs. Input Voltage**



**Dropout Voltage vs. Output Current**

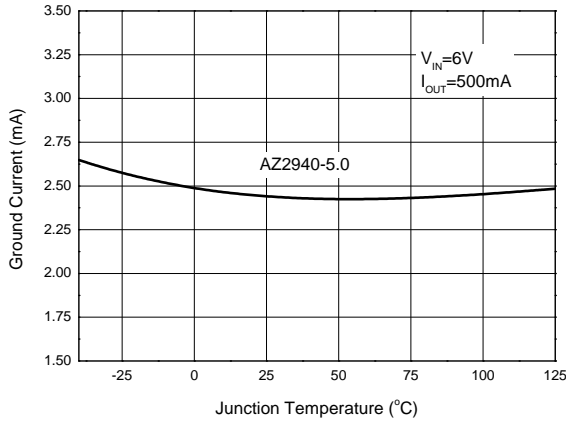


**Ground Current vs. Junction Temperature**

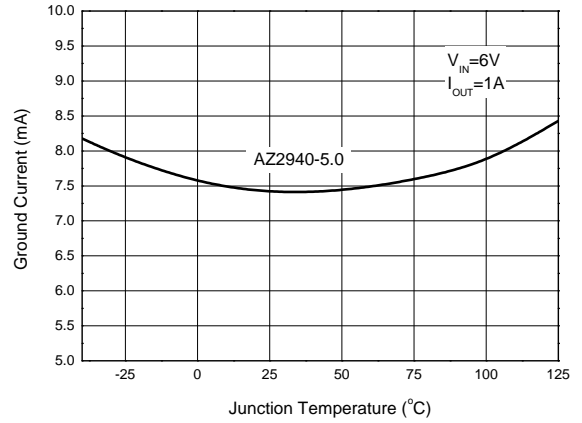


**Performance Characteristics (Cont.)**

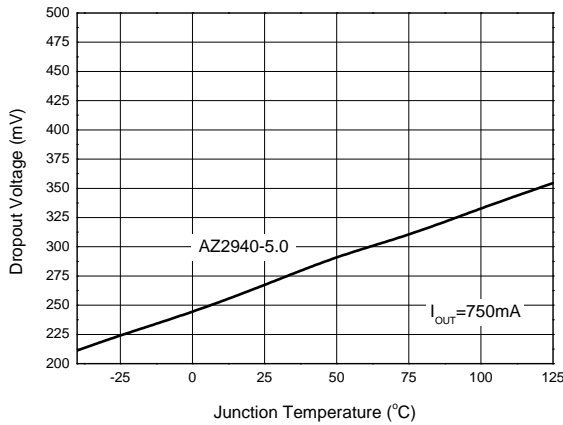
**Ground Current vs. Junction Temperature**



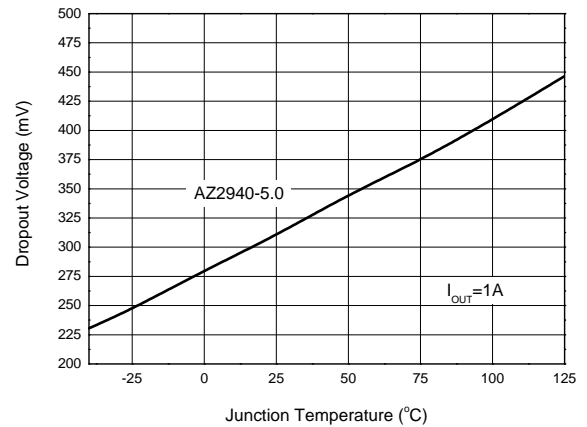
**Ground Current vs. Junction Temperature**



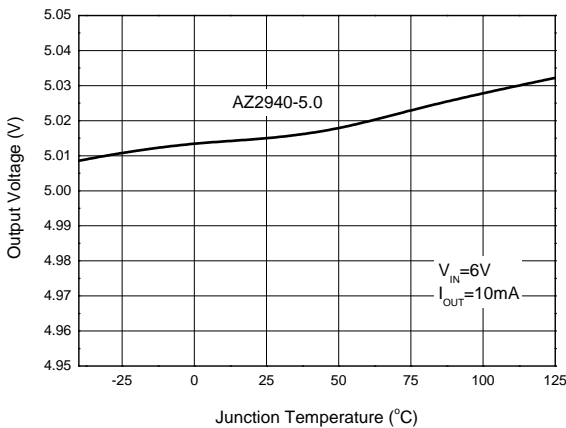
**Dropout Voltage vs. Junction Temperature**



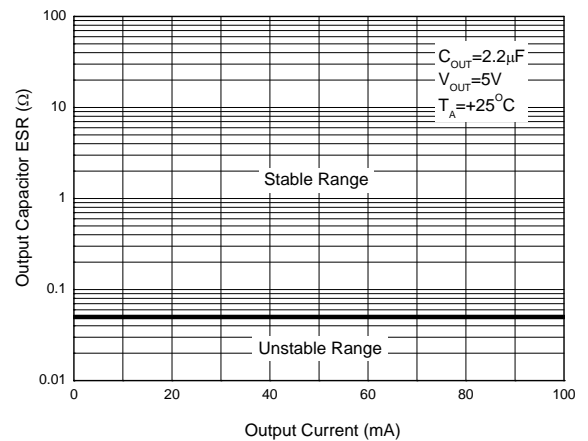
**Dropout Voltage vs. Junction Temperature**



**Output Voltage vs. Junction Temperature**

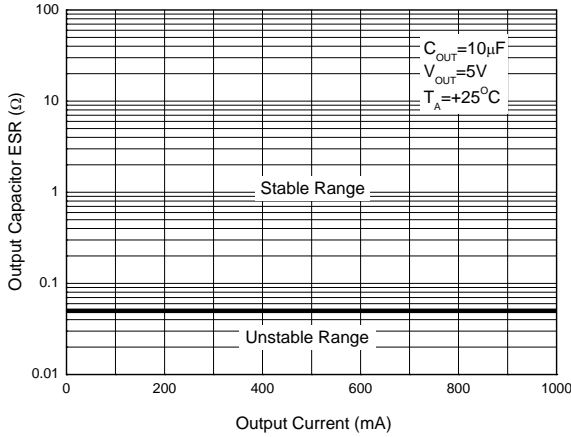


**Output Capacitor ESR vs. Output Current**

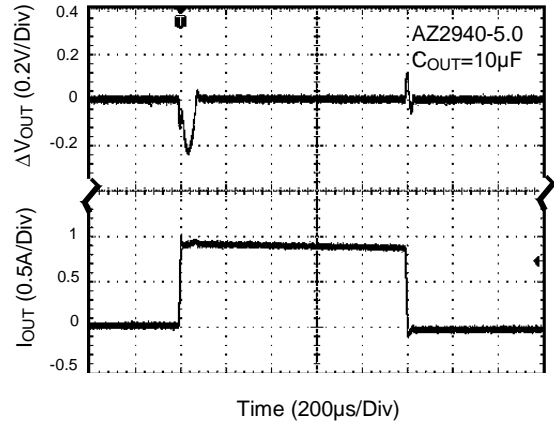


**Performance Characteristics (Cont.)**

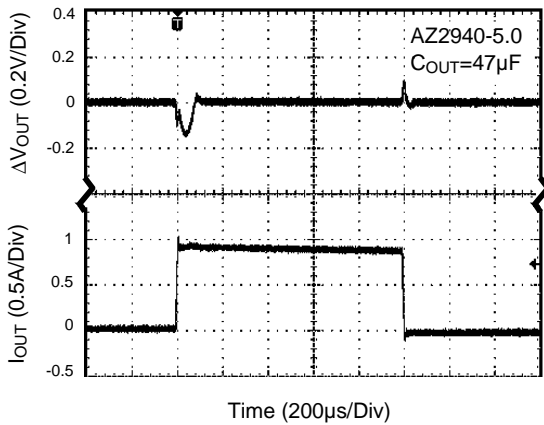
**Output Capacitor ESR vs. Output Current**



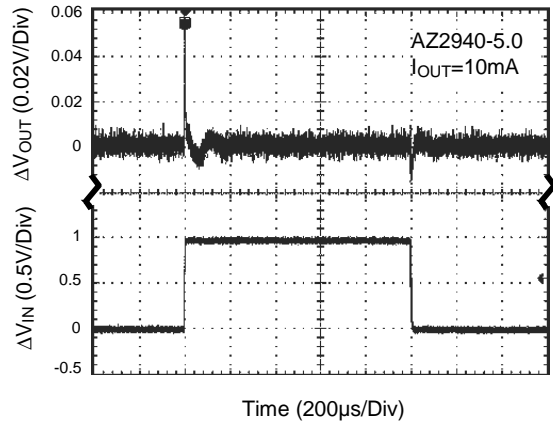
**Load Transient**



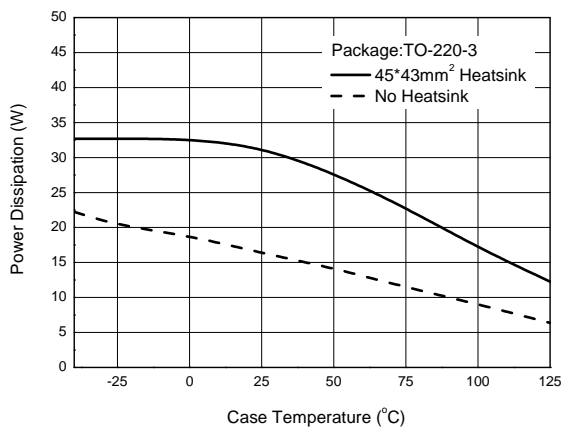
**Load Transient**



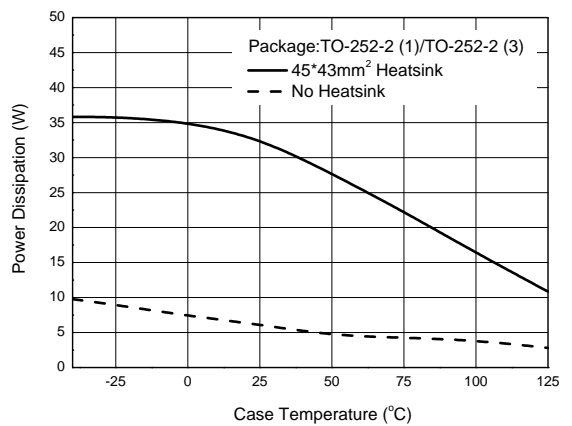
**Line Transient**



**Power Dissipation vs. Case Temperature**

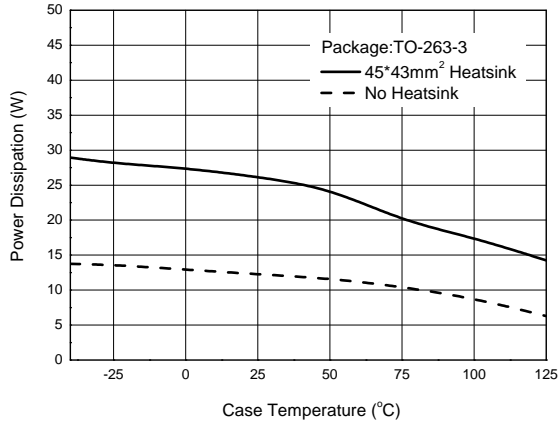


**Power Dissipation vs. Case Temperature**



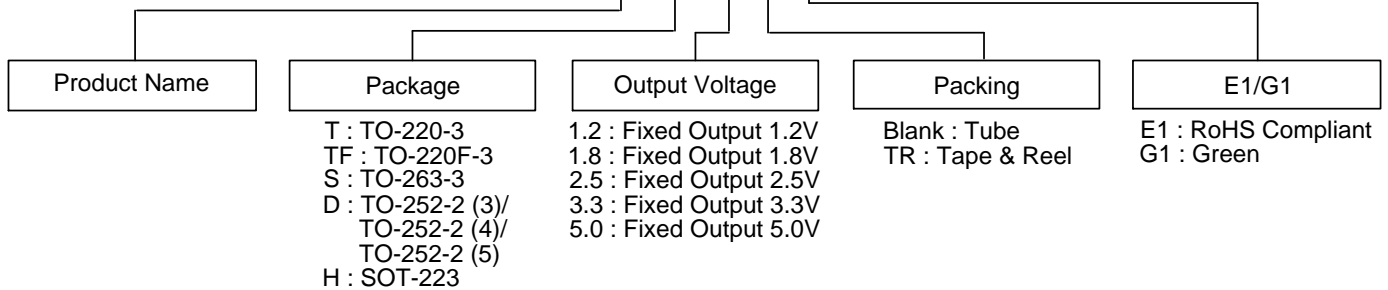
**Performance Characteristics (Cont.)**

**Power Dissipation vs. Case Temperature**



## Ordering Information

**AZ2940 XX - XX XX XX**



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.)

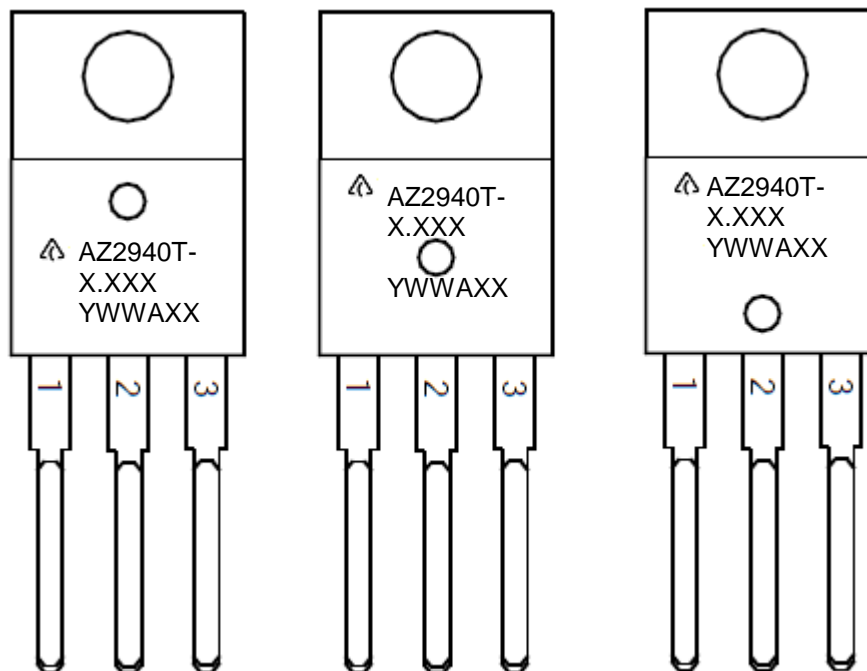


Package	Temperature Range	Part Number		Marking ID		Packing
		RoHS Compliant	Green	RoHS Compliant	Green	
SOT-223	-40 to +125°C	-	AZ2940H-1.2TRG1	-	GH12B	2500/Tape & Reel
		-	AZ2940H-1.8TRG1	-	GH12F	2500/Tape & Reel
		-	AZ2940H-2.5TRG1	-	GH12G	2500/Tape & Reel
		-	AZ2940H-3.3TRG1	-	GH12H	2500/Tape & Reel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

**Marking Information**

(1) TO-220-3

(Front View)

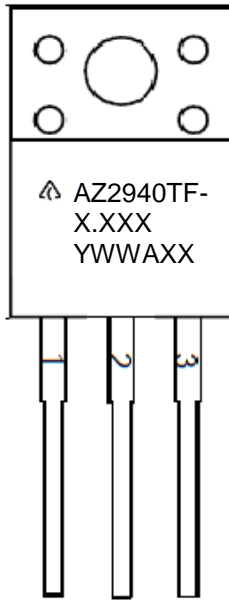


First and Second Lines: Logo and Marking ID  
(See Ordering Information)  
Third Line: Date Code  
Y: Year  
WW: Work Week of Molding  
A: Assembly House Code  
XX: Internal Code

**Marking Information** (Cont.)

(2) TO-220F-3

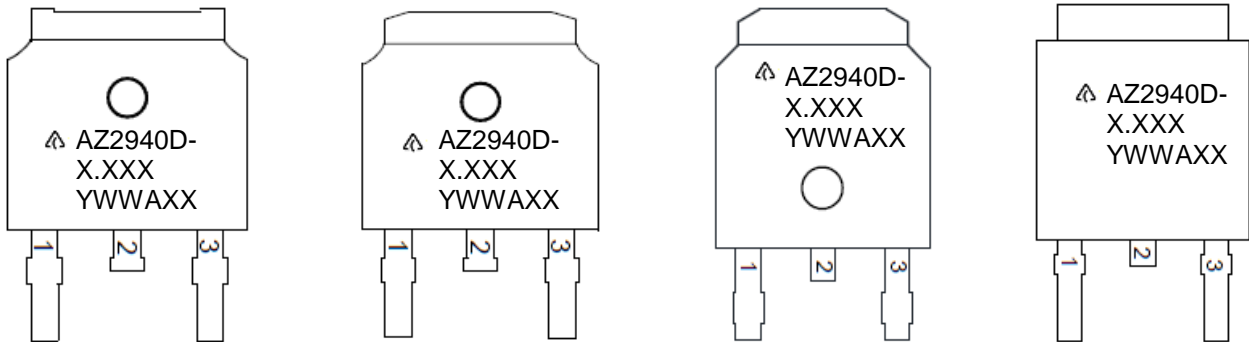
(Front View)



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)

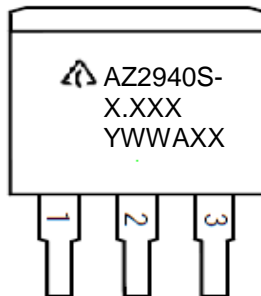


First and Second Lines: Logo and Marking ID  
(See Ordering Information)  
Third Line: Date Code  
Y: Year  
WW: Work Week of Molding  
A: Assembly House Code  
XX: Internal Code

**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

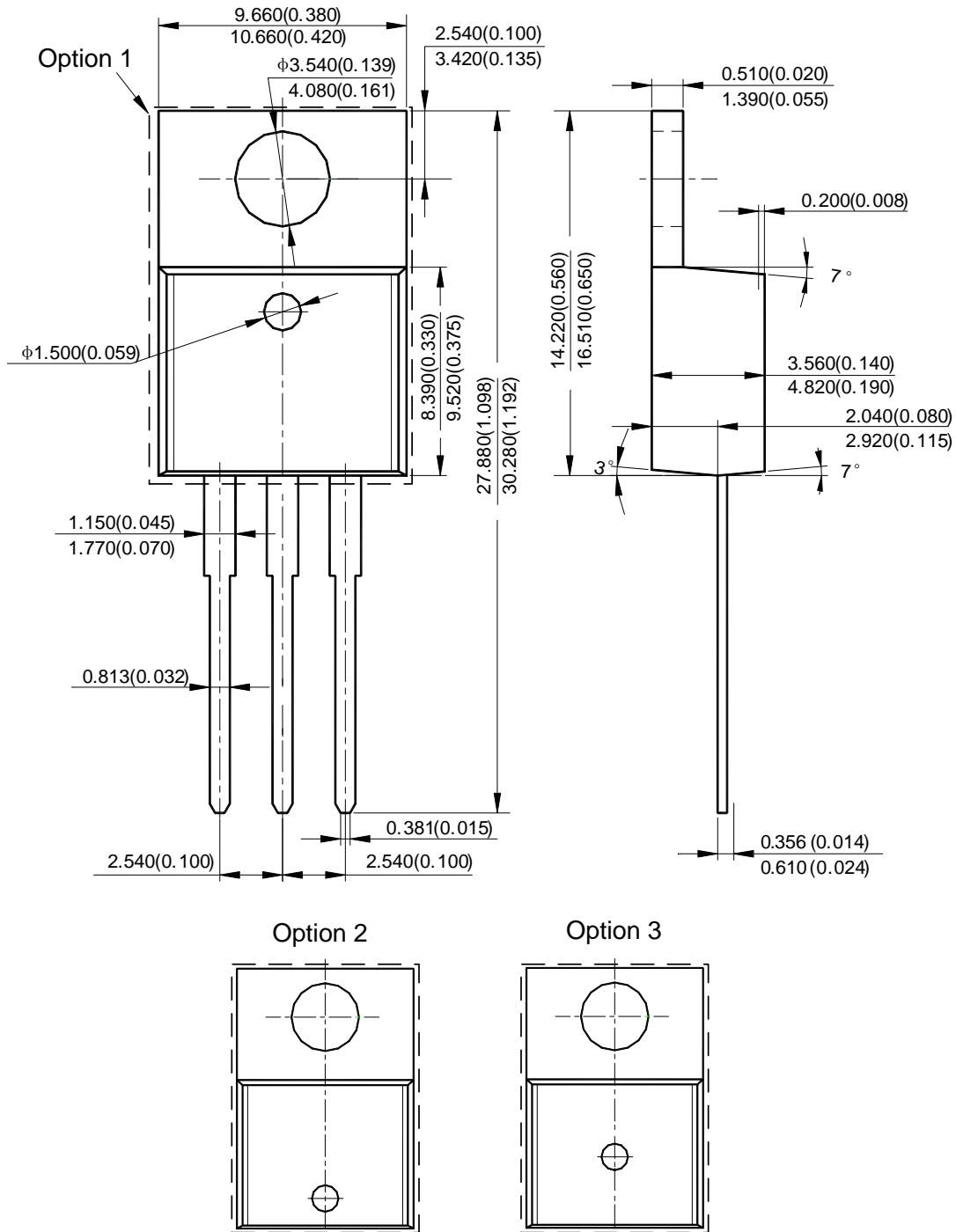
(Top View)



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

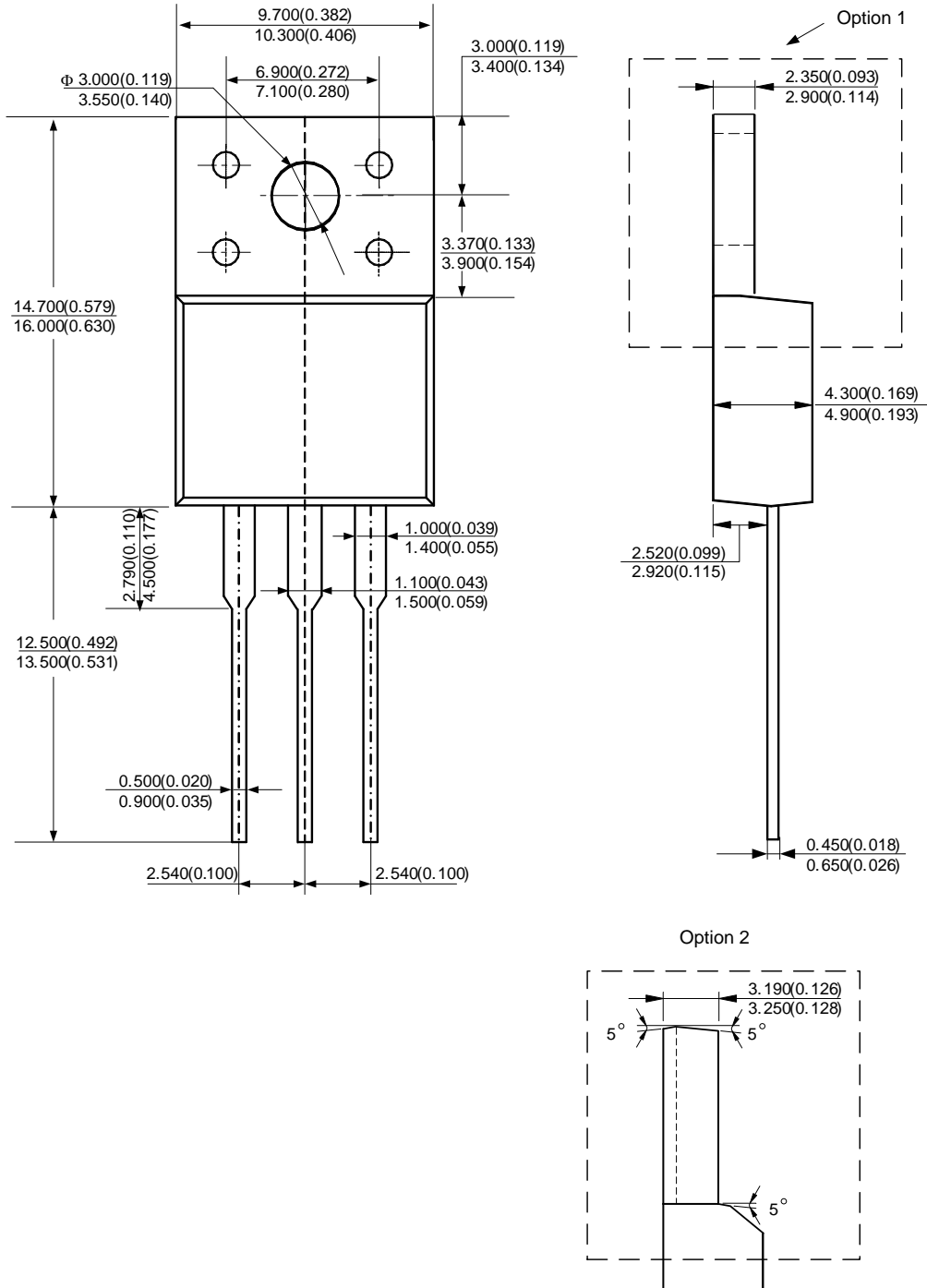
**Package Outline Dimensions** (All dimensions in mm(inch).)

(1) Package Type: TO-220-3



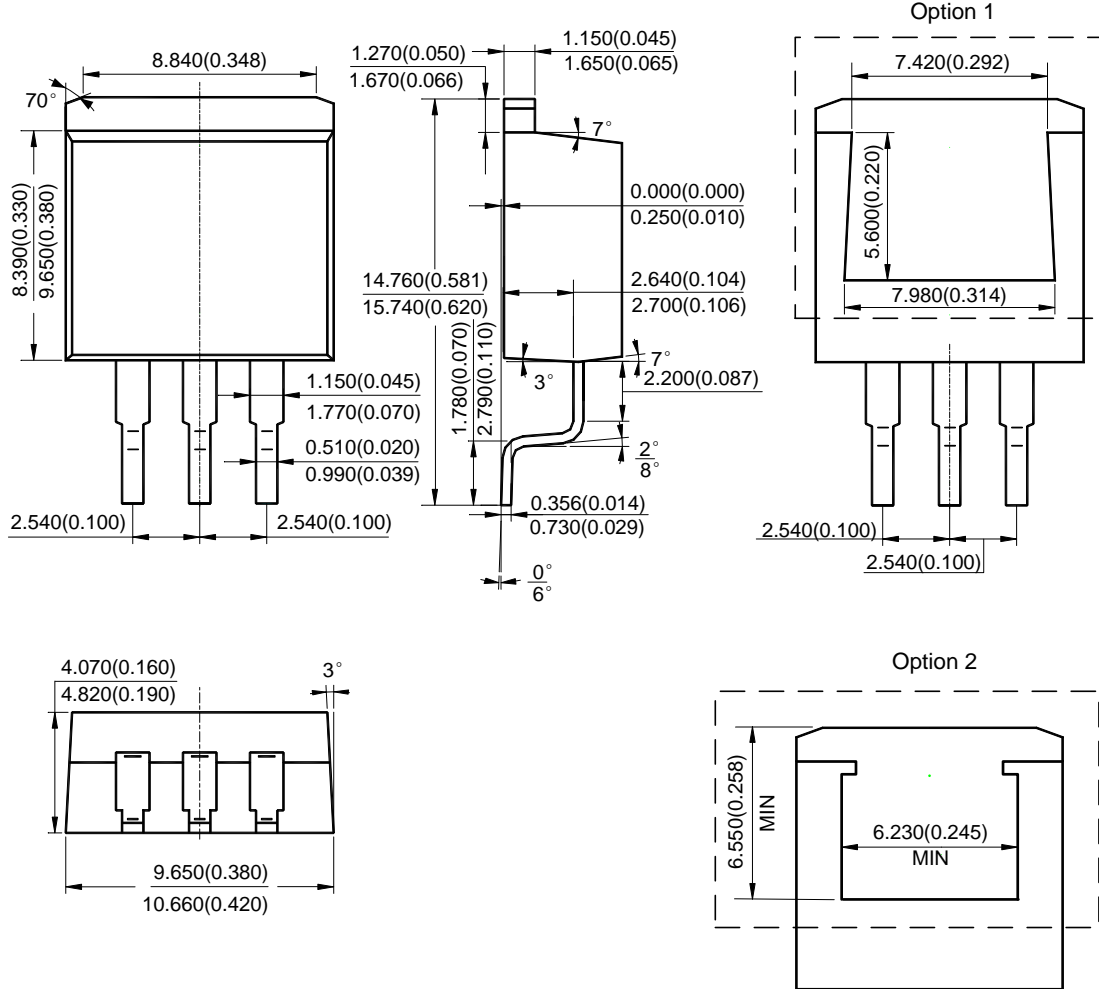
**Package Outline Dimensions** (Cont. All dimensions in mm(inch).)

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



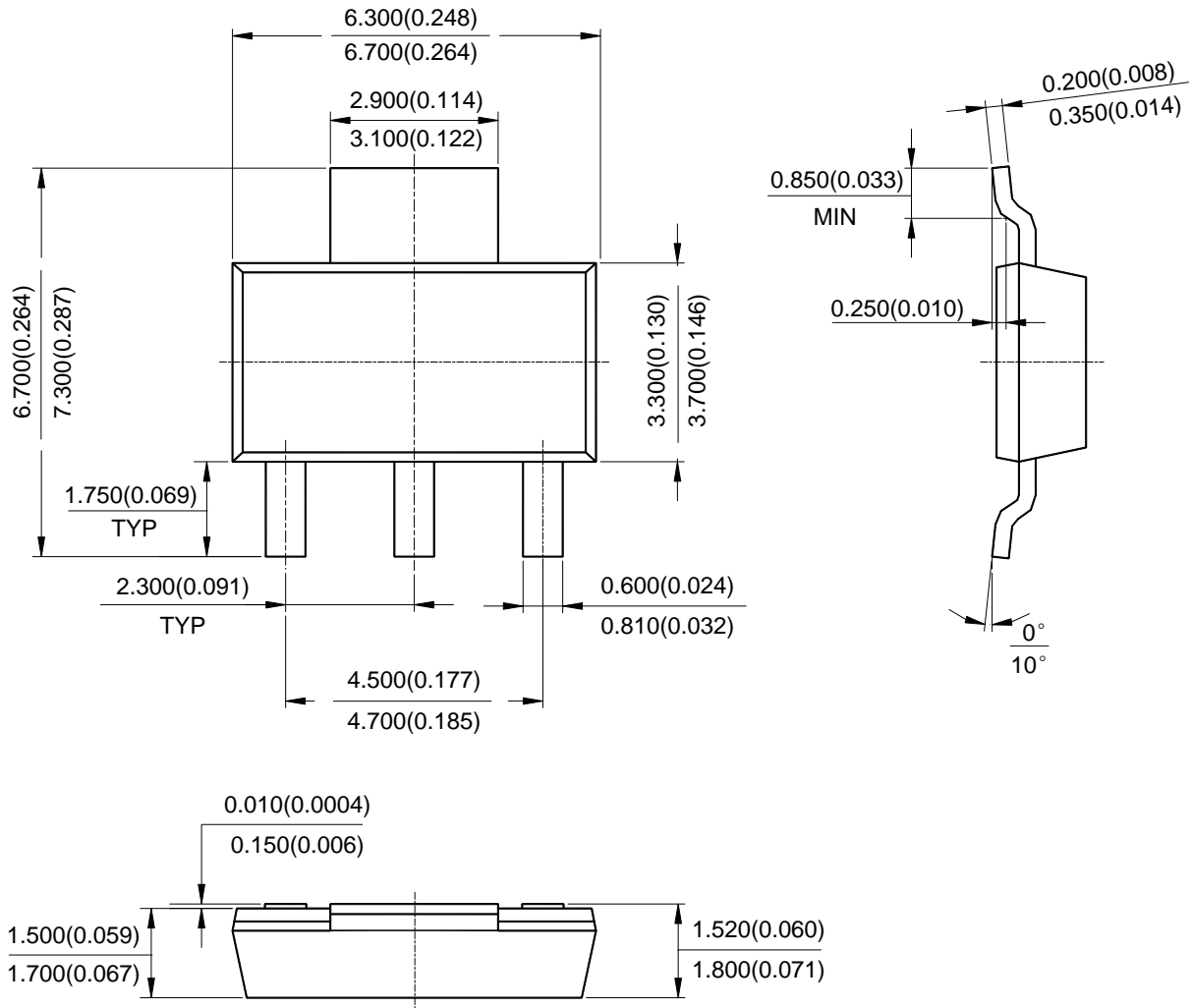
**Package Outline Dimensions** (Cont. All dimensions in mm(inch).)

(3) Package Type: TO-263-3



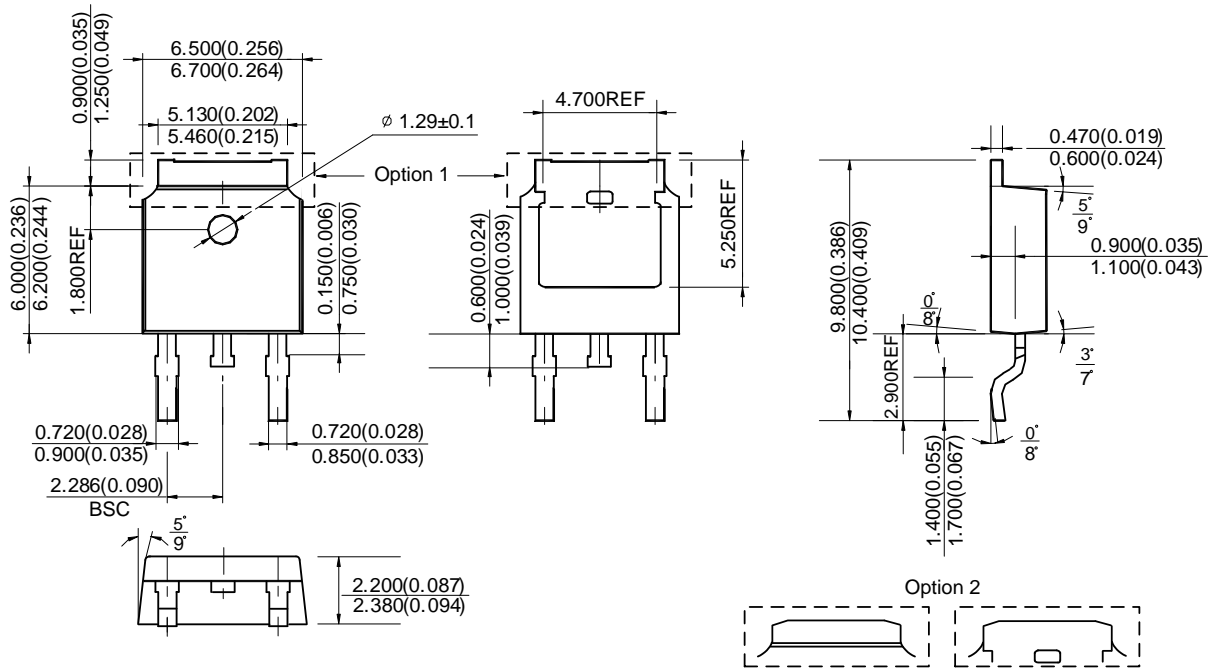
**Package Outline Dimensions** (Cont. All dimensions in mm(inch).)

(4) Package Type: SOT-223



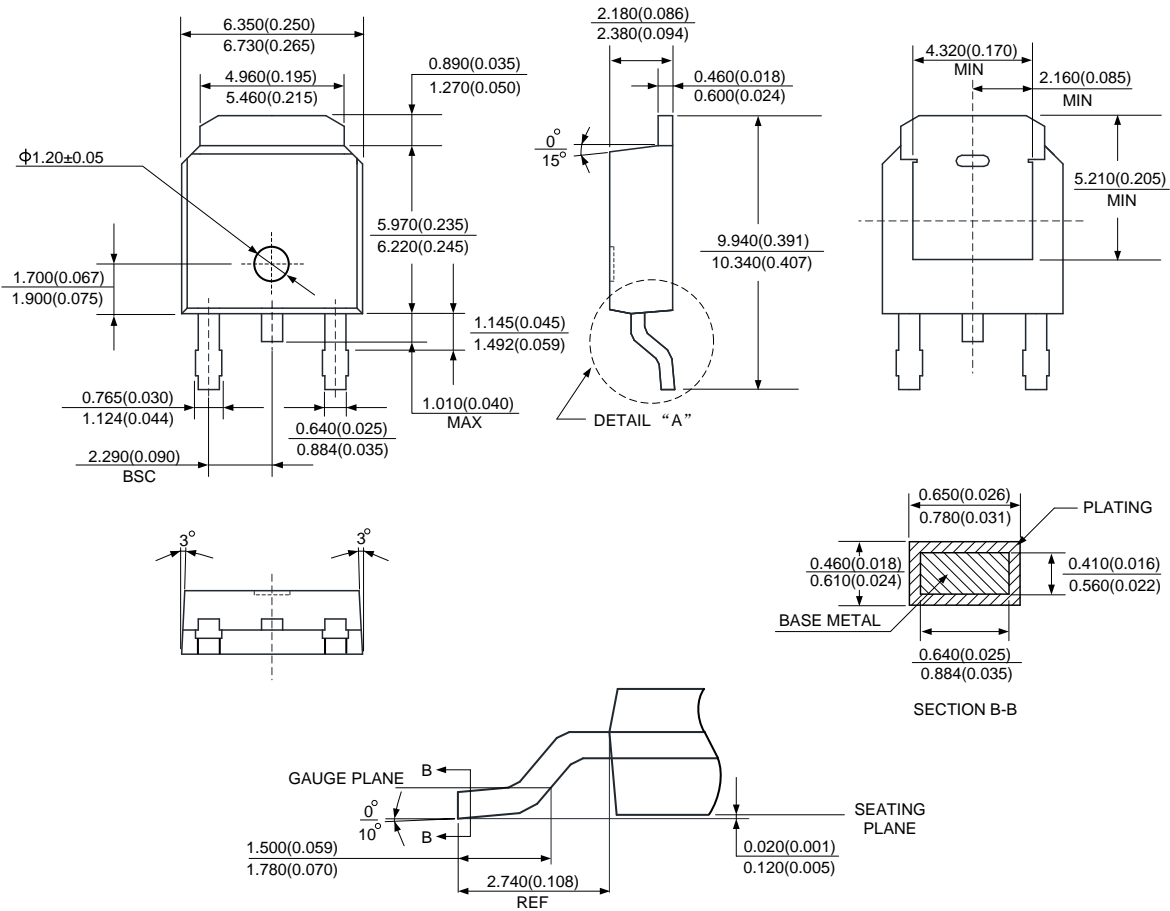
**Package Outline Dimensions** (Cont. All dimensions in mm(inch).)

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



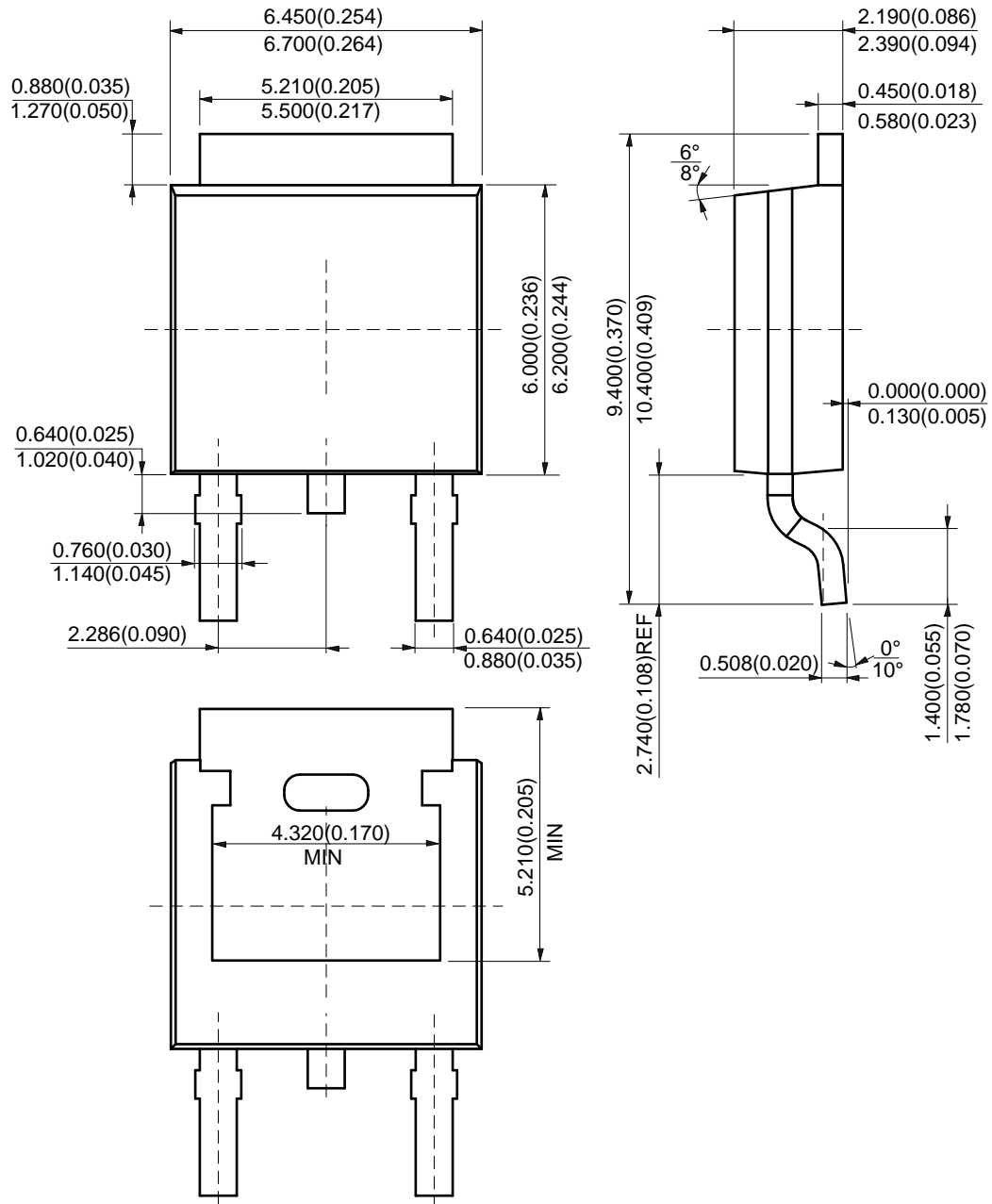
**Package Outline Dimensions** (Cont. All dimensions in mm(inch).)

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



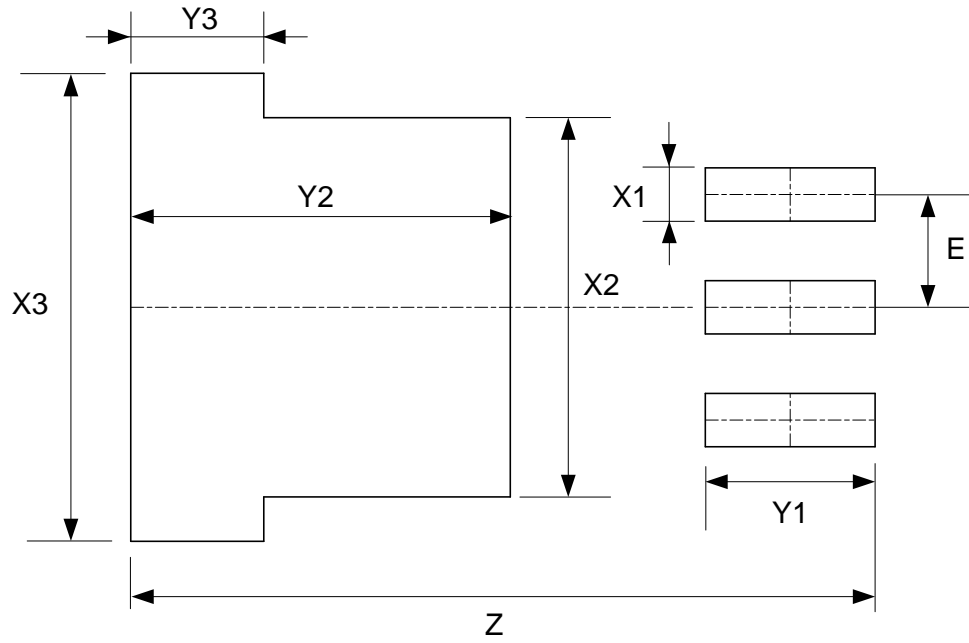
**Package Outline Dimensions** (Cont. All dimensions in mm(inch).)

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



## Suggested Pad Layout

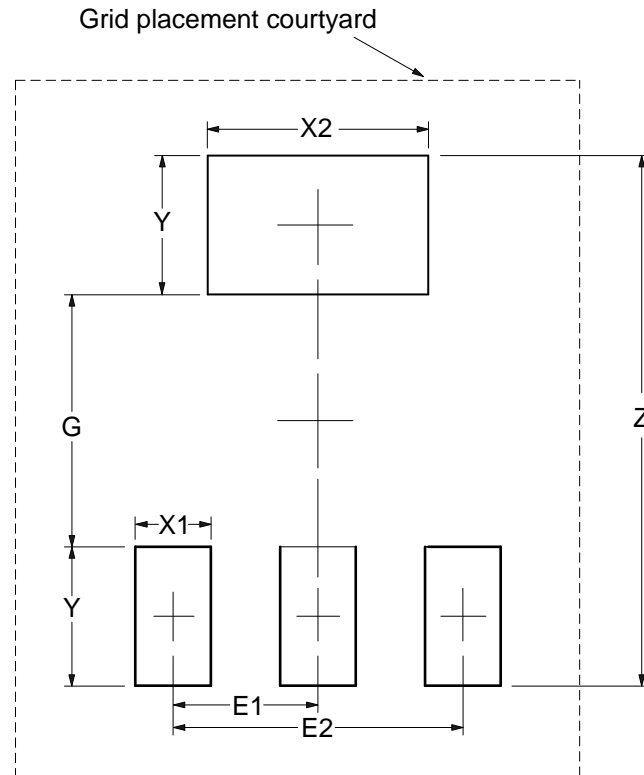
(1) Package Type: TO-263-3



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.)**

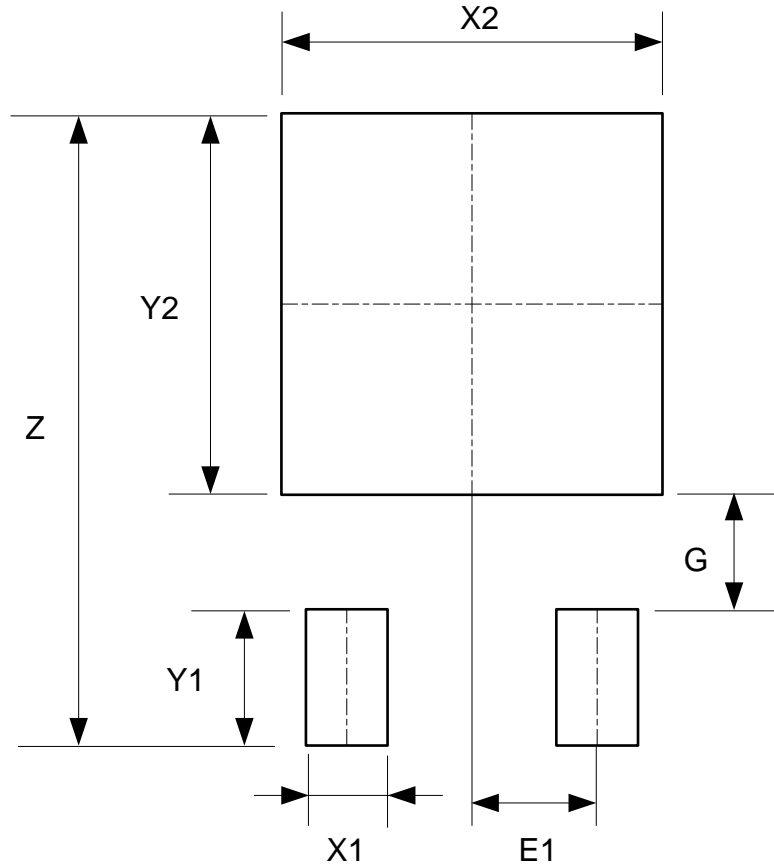
(2) Package Type: SOT-223



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.)**

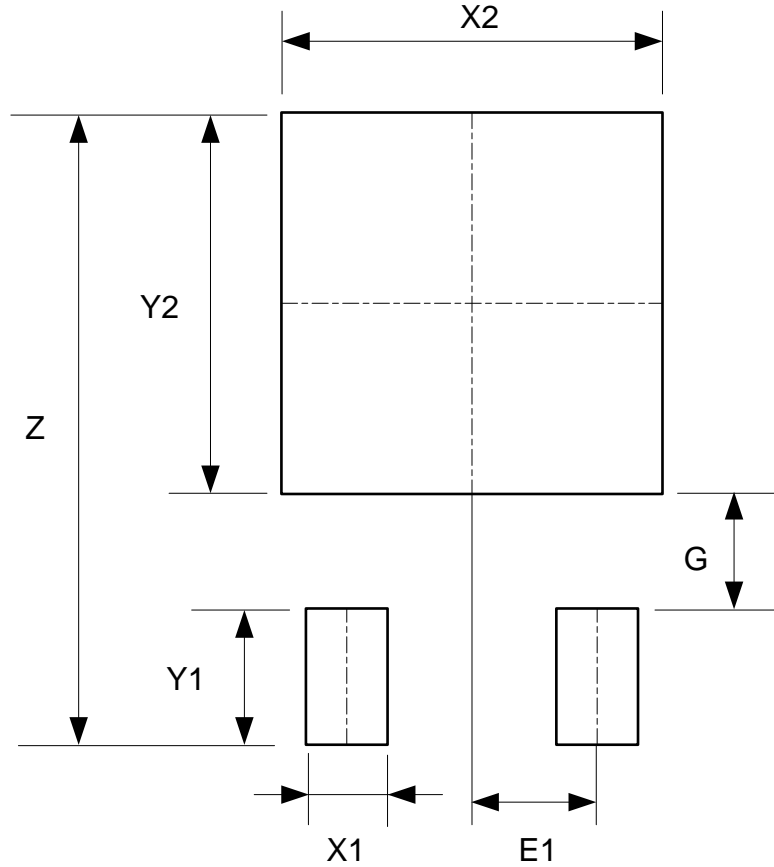
(3) Package Type: TO-252-2 (3)



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.)

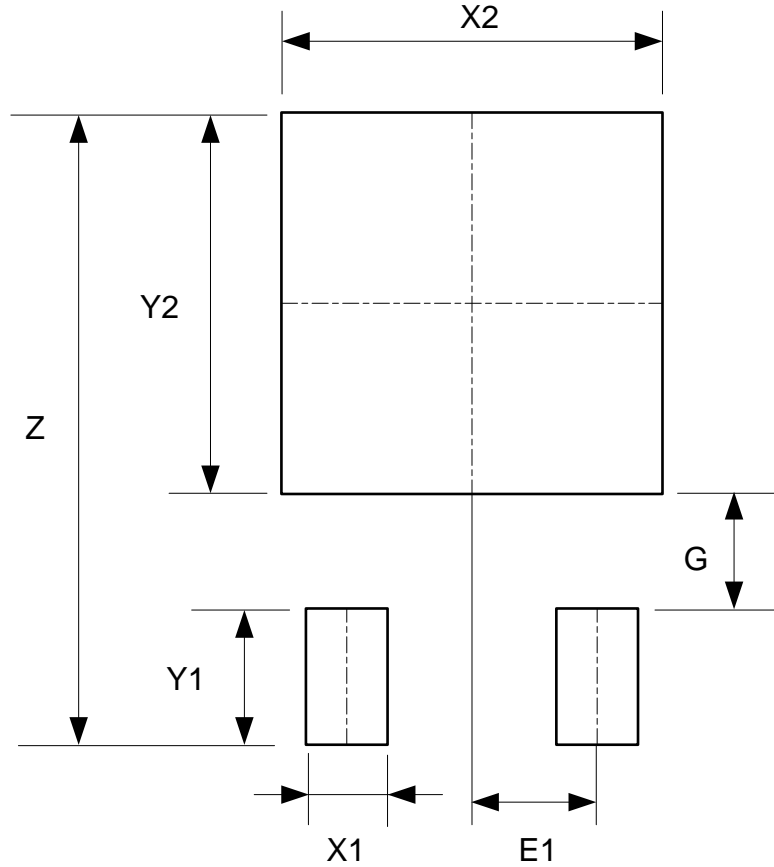
(4) Package Type: TO-252-2 (4)



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.)**

(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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