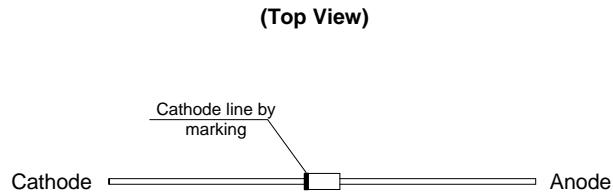
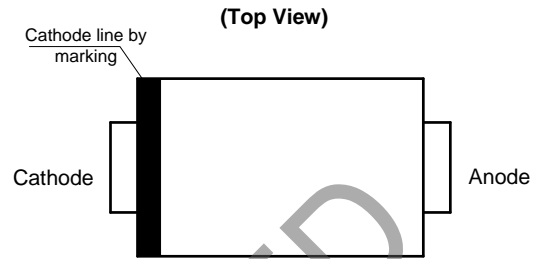


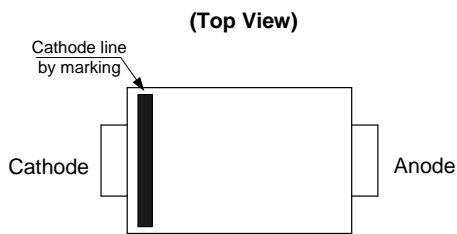
## Pin Assignments



DO-15

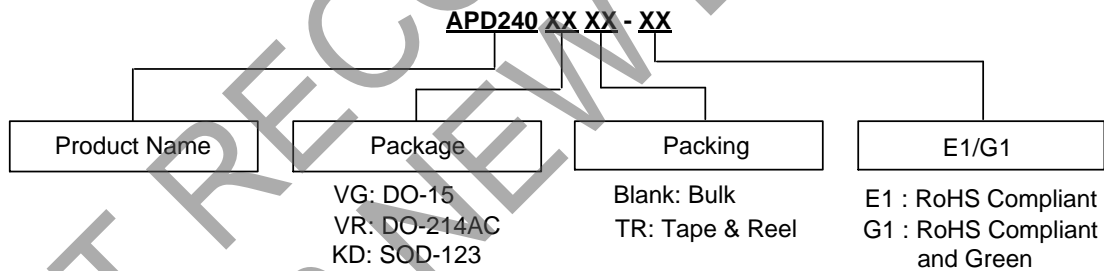


DO-214AC



SOD-123

## Ordering Information



Package	Temperature Range	Part Number	Marking ID	Packing	Status	Replacement
DO-15	-65 to +125°C	APD240VG-E1	D240VG	500/Bulk	NRND	—
DO-214AC	-65 to +125°C	APD240VRTR-G1	240VRG	7500/Tape & Reel	NRND	<a href="#">B240A-13-F</a>
SOD-123	-65 to +125°C	APD240KDTR-G1	G11	3000/Tape & Reel	NRND	<a href="#">B240S1F-7</a>



## Marking Information

### (1) DO-15

(Top View)



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

### (2) DO-214AC

(Top View)



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

### (3) SOD-123

(Top View)



First Line: Logo and Marking ID  
(See Ordering Information)

## Maximum Ratings (T<sub>A</sub> = +25°C, unless otherwise noted.) (Note 4)

Characteristic	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	40	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	28	V
Average Rectified Forward Current 0.375 " (9.5mm) Lead Length (See Figure 1)	I <sub>F(AV)</sub>	2.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-wave on Rated Load	I <sub>FSM</sub>	50	A
Operating Junction Temperature Range (Note 5)	T <sub>J</sub>	-65 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	°C

Notes: 4. 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.  
5. The heat generated must be less than the thermal conductivity from Junction to Ambient:  $dP_D/dT_J < 1/\theta_{JA}$ .

## Thermal Characteristics (T<sub>A</sub> = +25°C, unless otherwise noted.)

Characteristic	Symbol	Rating	Unit
Typical Thermal Resistance (Note 6)	R <sub>θJA</sub>	DO-15	52
		DO-214AC	90
		SOD-123	200

Note 6: Device mounted on heat sink, with minimum recommended pad layout per <http://www.diodes.com/package-outlines.html>.

## Electrical Characteristics (T<sub>A</sub> = +25°C, unless otherwise noted.)

Characteristic	Symbol	Rating	Unit	Test Condition
Forward Voltage @ I <sub>F</sub> = 2.0A	V <sub>F</sub>	0.5	V	—
Reverse Current @ Rated V <sub>R</sub> (Note 7)	I <sub>R</sub>	0.5	mA	T <sub>A</sub> = +25°C
		10		T <sub>A</sub> = +100°C

Note 7: Short duration pulse test used to minimize self-heating effect, Pulse Test: 300μs pulse width, 1.0% duty cycle.

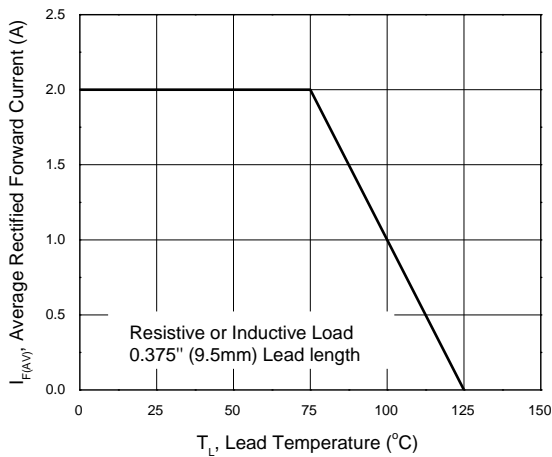


Figure 1. Forward Current Derating Curve

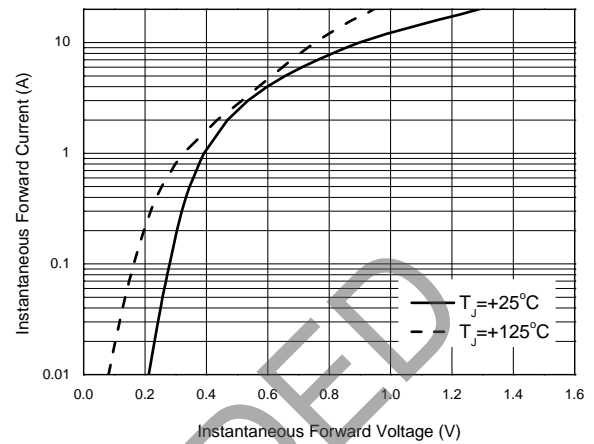


Figure 2. Typical Instantaneous Forward Characteristics

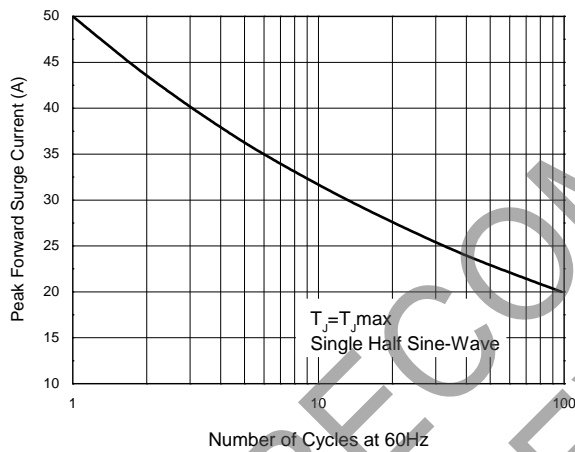


Figure 3. Maximum Non-Repetitive Peak Forward Surge Current

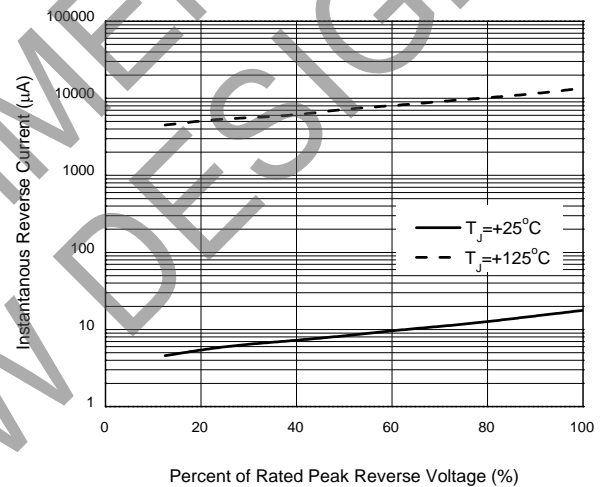


Figure 4. Typical Reverse Characteristics

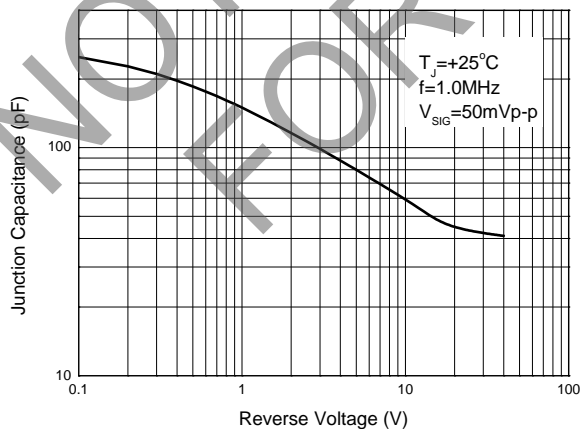
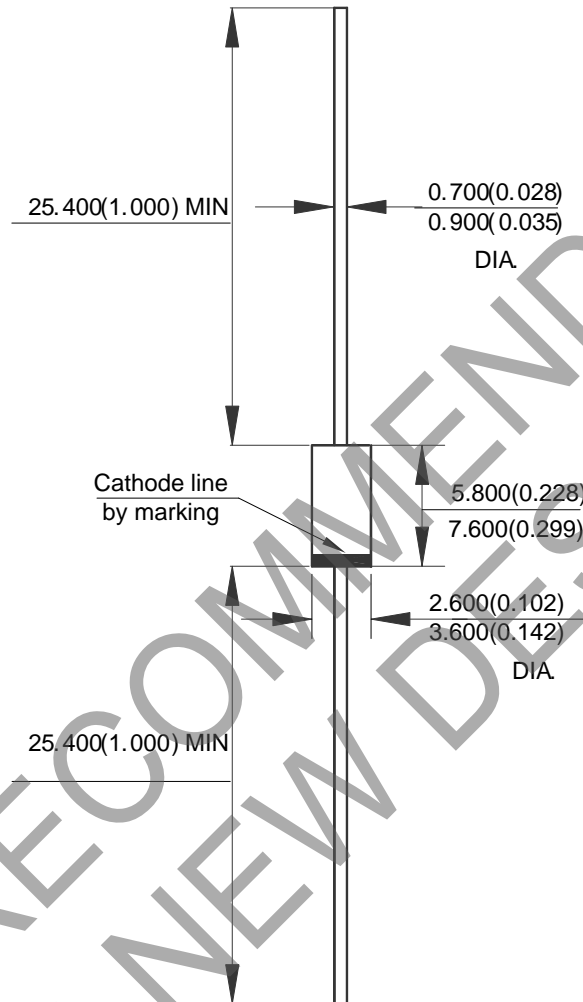


Figure 5. Typical Junction Capacitance

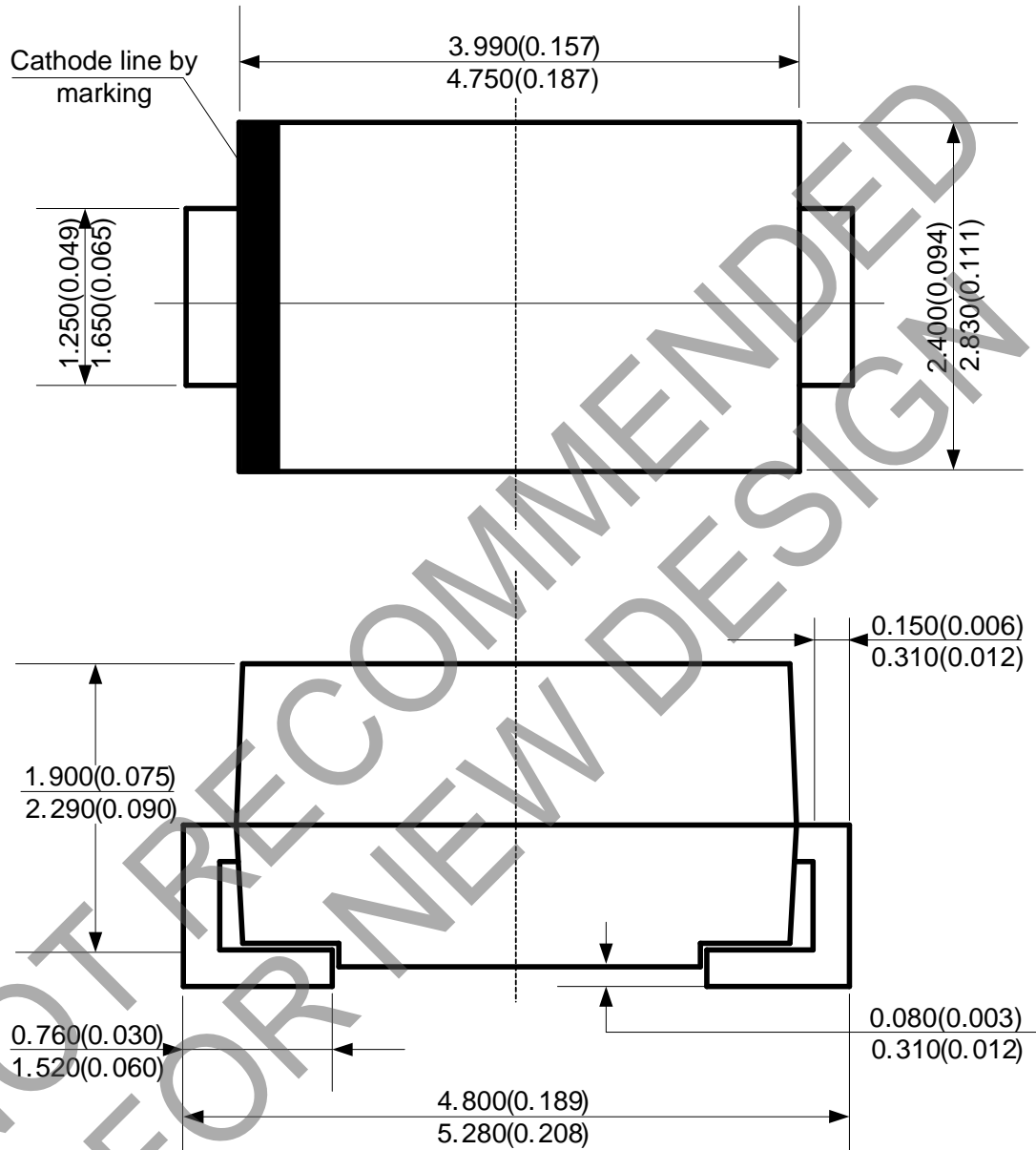
**Package Outline Dimensions** (All dimensions in mm(inch).)

(1) Package Type: DO-15



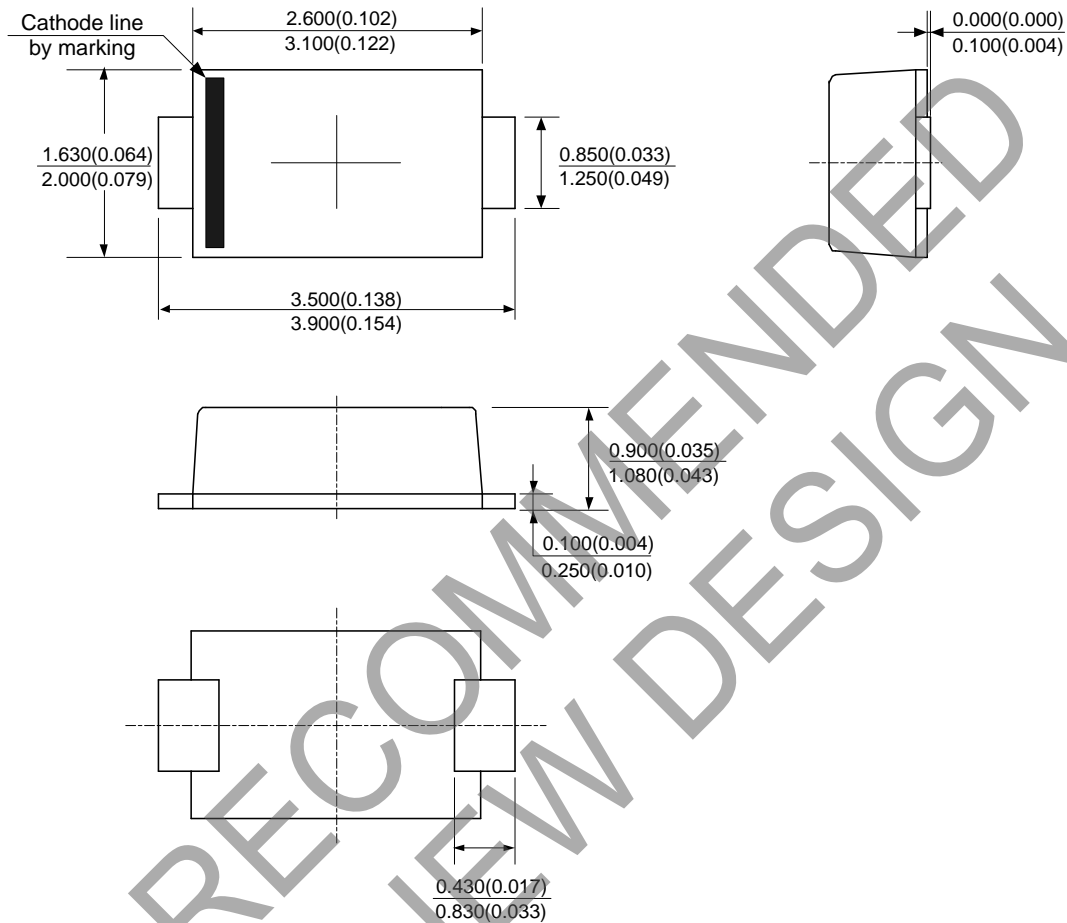
**Package Outline Dimensions** (All dimensions in mm(inch).) (continued)

(2) Package Type: DO-214AC



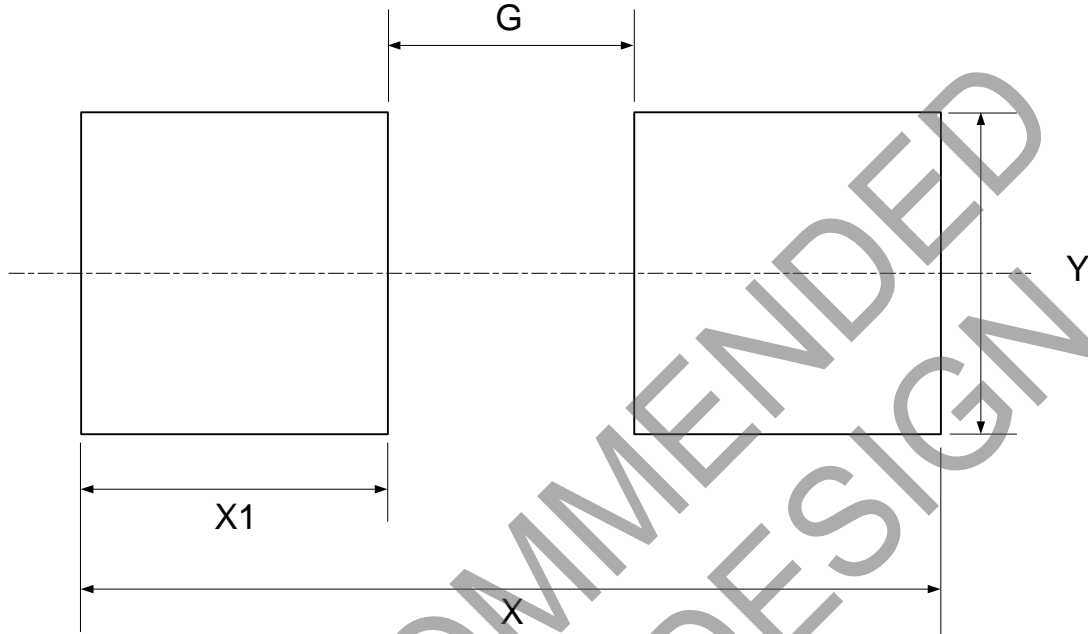
**Package Outline Dimensions** (All dimensions in mm(inch).) (continued)

(3) Package Type: SOD-123



## Suggested Pad Layout

(1) Package Type: DO-214AC

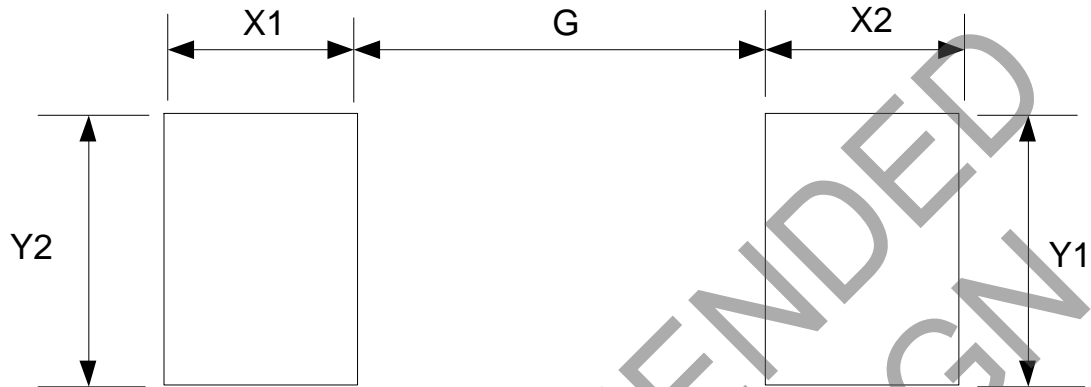


Dimensions	Y (mm)/(inch)	X1 (mm)/(inch)	G (mm)/(inch)	X (mm)/(inch)
Value	2.100/0.083	2.000/0.079	1.600/0.063	5.600/0.220



**Suggested Pad Layout** (continued)

(2) Package Type: SOD-123



Dimensions	G (mm)/(inch)	X1 (mm)/(inch)	X2 (mm)/(inch)	Y1 (mm)/(inch)	Y2 (mm)/(inch)
Value	2.100/0.083	1.000/0.039	1.000/0.039	1.400/0.055	1.400/0.055

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