SCHOTTKY BARRIER RECTIFIERS APD260

Features

- Low Forward Voltage Drop
- Very Small Conduction Losses
- High Surge Capability
- Surge Overload Rating up to 50A Peak Value

Applications

- Low Voltage High Frequency Inverters
- DC-DC Converters
- Free Wheeling
- Polarity Protection

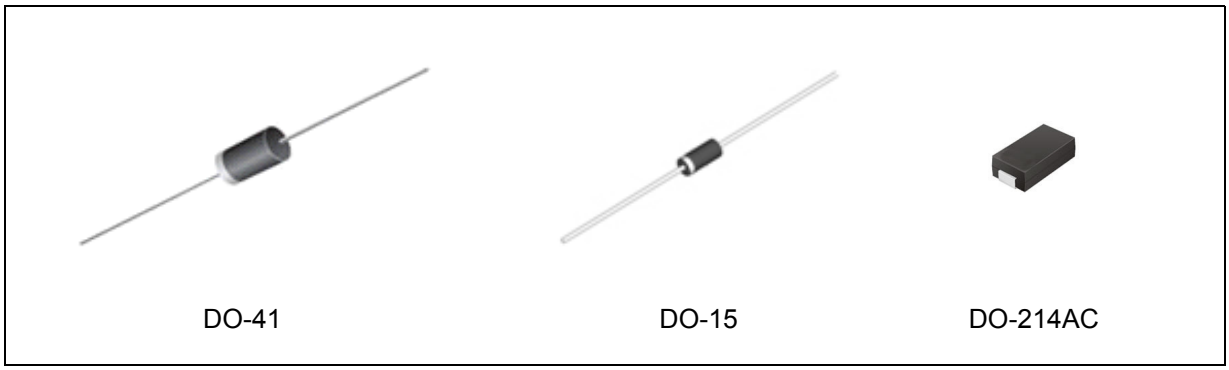


Figure 1. Package Types of APD260

Pin Configuration

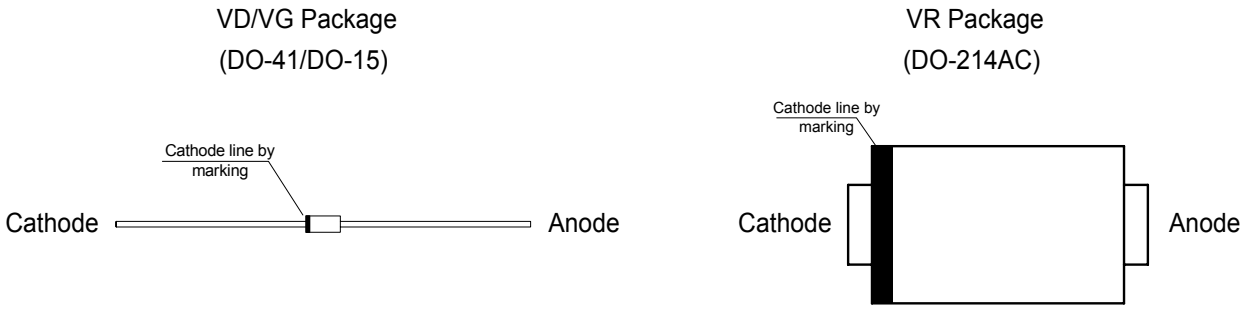
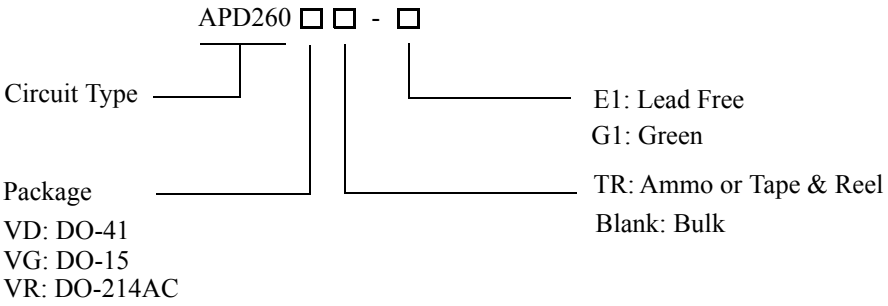


Figure 2. Pin Configuration of APD260

Ordering Information



Package	Temperature Range	Part Number		Marking ID		Packing Type
		Lead Free	Green	Lead Free	Green	
DO-41	-65 to 125°C	APD260VD-E1	APD260VD-G1	D260VD	260VDG	Bulk
		APD260VDTR-E1	APD260VDTR-G1	D260VD	260VDG	Ammo
DO-15	-65 to 125°C	APD260VG-E1	APD260VG-G1	D260VG	260VGG	Bulk
		APD260VGTR-E1	APD260VGTR-G1	D260VG	260VGG	Ammo
DO-214AC	-65 to 125°C		APD260VRTR-G1		260VRG	Tape & Reel

BCD Semiconductor's Pb-free products, as designated with "E1" suffix in the part number, are RoHS compliant. Products with "G1" suffix are available in green packages.

Absolute Maximum Ratings (T_A=25°C, unless otherwise noted) (Note 1)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Maximum RMS Voltage	V_{RMS}	42	V
Average Rectified Forward Current 0.375 " (9.5mm) Lead Length (See Figure 3)	$I_{F\ (AV)}$	2.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-wave on Rated Load	I_{FSM}	50	A
Operating Junction Temperature Range	T_J	-65 to 125	°C
Storage Temperature Range	T_{STG}	-65 to 150	°C

Note 1: 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.

Thermal Characteristics (T_A=25°C, unless otherwise noted)

Parameter	Symbol		Values	Unit
Typical Thermal Resistance	θ_{JA}	DO-41/DO-15	52	°C/W
		DO-214AC	90	

Electrical Characteristics (T_A=25°C, unless otherwise noted)

Parameter		Symbol	Values	Unit
Forward Voltage @ I_F=2.0A		V_F	0.68	V
Reverse Current @ Rated V_R (Note 2)	T_A=25°C	I_R	0.5	mA
	T_A=100°C		10	

Note 2: Pulse Test: 300μs pulse width, 1.0% duty cycle.

Typical Performance Characteristics (T_A=25°C, unless otherwise noted)

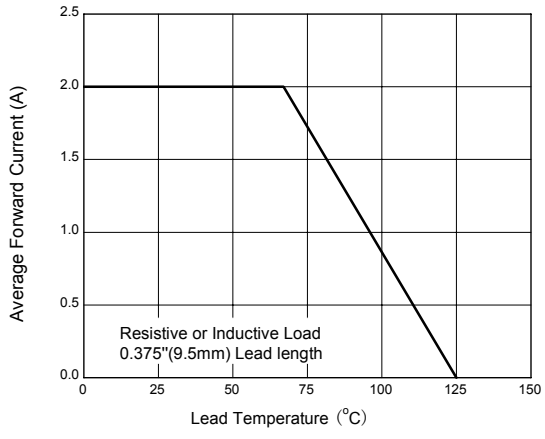


Figure 3. Forward Current Derating Curve

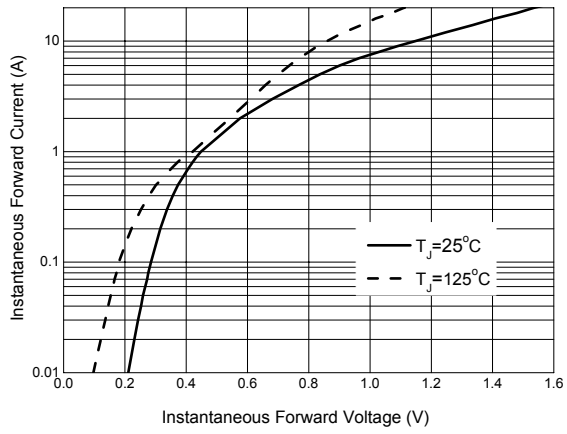


Figure 4. Typical Instantaneous Forward Characteristics

Typical Performance Characteristics (Continued)

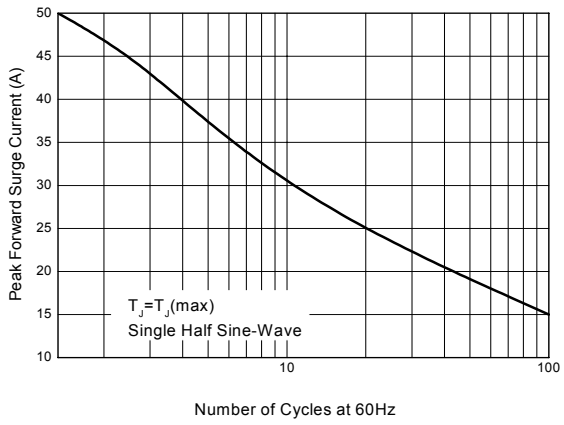


Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

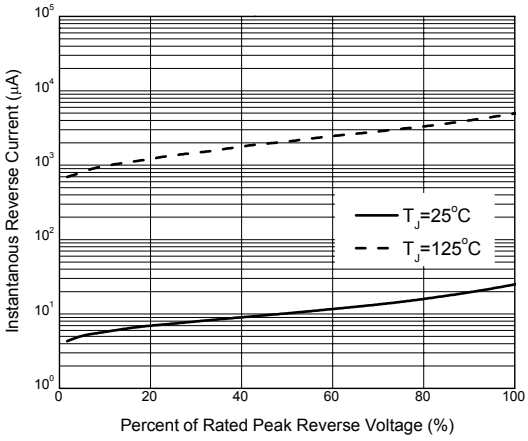


Figure 6. Typical Reverse Characteristics

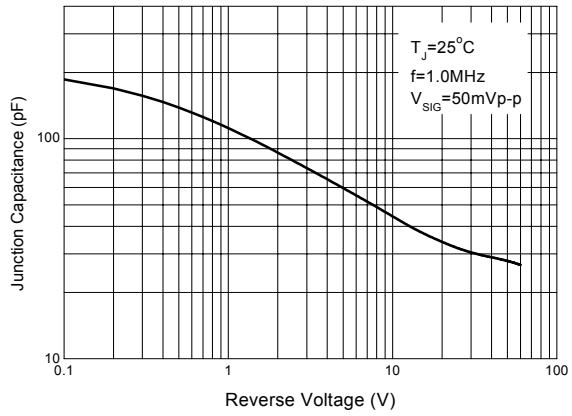
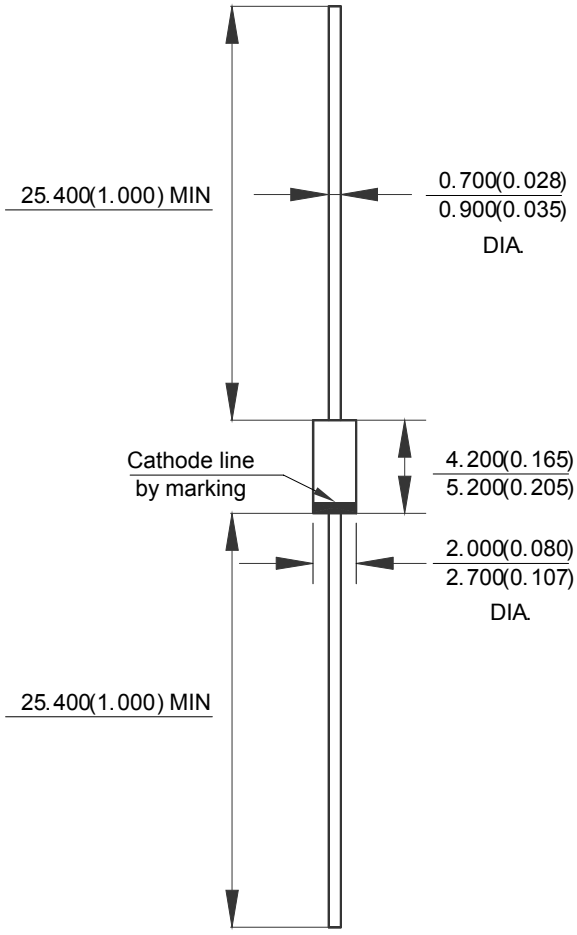


Figure 7. Typical Junction Capacitance

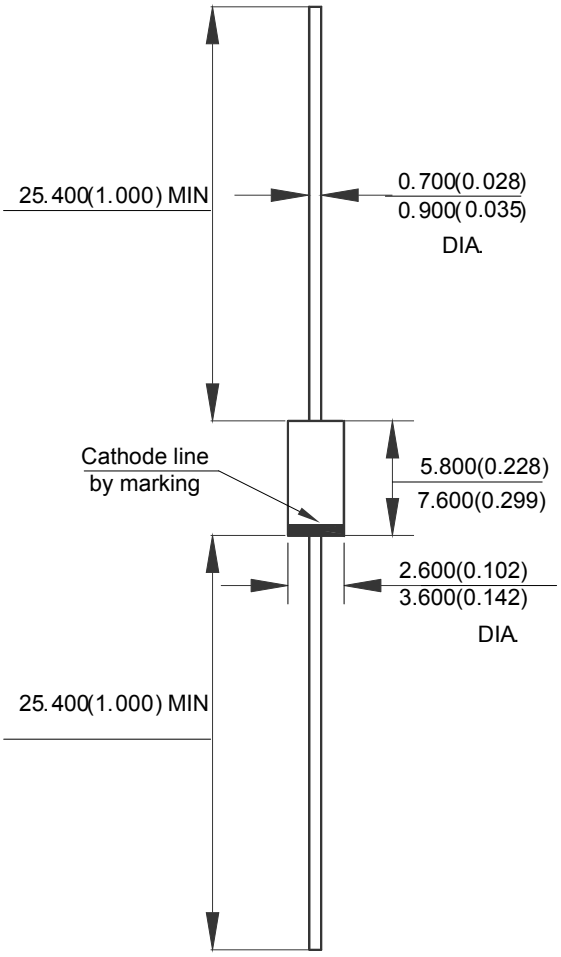
Mechanical Dimensions

DO-41 **Unit: mm(inch)**



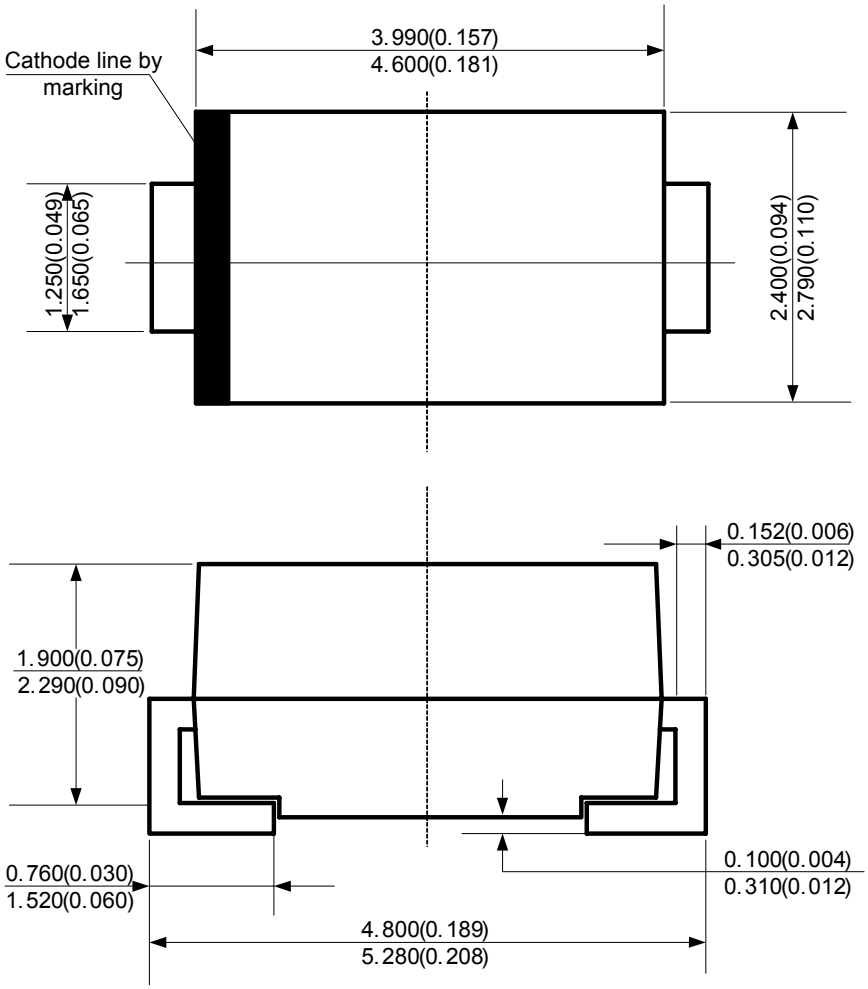
Mechanical Dimensions (Continued)

DO-15 **Unit: mm(inch)**



Mechanical Dimensions (Continued)

DO-214AC **Unit: mm(inch)**



BCD Semiconductor Manufacturing Limited

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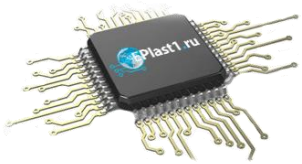

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