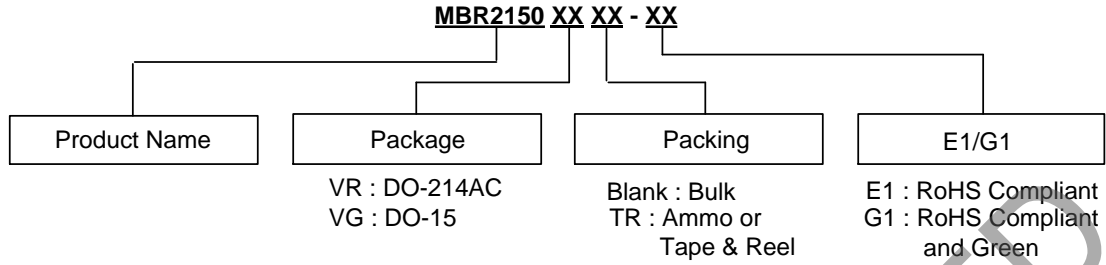


Ordering Information (Note 4)



Package	Part Number	Marking ID	Packing	Status	Replacement
DO-214AC	MBR2150VRTR-G1	2150VR	7500/Tape & Reel	NRND	SBR2U150SA
DO-15	MBR2150VGTR-E1	2150VG	1500/Ammo	NRND	—

Note: 4. For packaging details, go to our website at <https://www.diodes.com/design/support/packaging/diodes-packaging/>.

Marking Information

(1) 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)

Marking Information (continued)

(2) 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)

Absolute Maximum Ratings (Note 5)

Characteristic	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	150	V
Average Rectified Forward Current (Rated V_R , $T_C = TBD$)	$I_{F(AV)}$	2	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Half-Wave, Single-Phase, 60Hz)	I_{FSM}	75	A
Operating Junction Temperature Range (Note 6)	T_J	-65 to +150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C
Voltage Rate of Change (Rated V_R)	dv/dt	10,000	V/ μ s
ESD (Machine Model = C)	—	400	V
ESD (Human Body Model = 3B)	—	8000	V

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

Thermal Characteristics

Characteristic	Symbol	Rating		Unit
Maximum Thermal Resistance (Junction to Lead) (Note 7)	$R_{\theta JL}$	DO-214AC	23	°C/W
		DO-15		
Maximum Thermal Resistance (Junction to Ambient) (Note 7)	$R_{\theta JA}$	DO-214AC	90	
		DO-15	80	

Note: 7. Device mounted on heat sink with minimum recommended pad layout per <http://www.diodes.com/package-outlines.html>.

Electrical Characteristics

Characteristic	Symbol	Rating	Unit	Test Condition
Maximum Instantaneous Forward Voltage Drop (Note 8)	V_F (MAX)	0.85	V	$I_F = 2A$, $T_C = +25^\circ C$
		0.67		$I_F = 2A$, $T_C = +125^\circ C$
Maximum Instantaneous Reverse Current (Note 8)	I_R (MAX)	0.1	mA	Rated DC Voltage, $T_C = +25^\circ C$
		2.0		Rated DC Voltage, $T_C = +125^\circ C$

Note: 8. Short-duration pulse test used to minimize self-heating effect. Pulse Test: Pulse Width = 300 μ s, Duty Cycle \leq 2.0%.

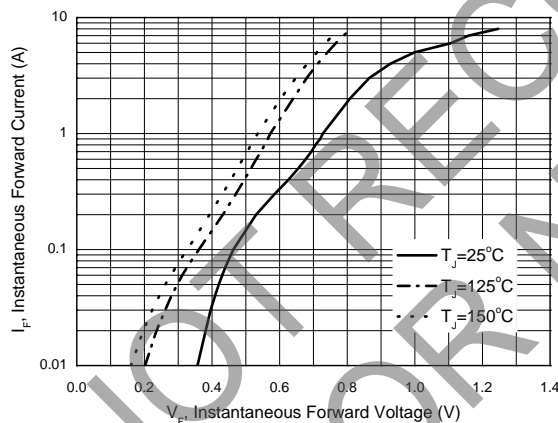


Figure 1. Typical Forward Characteristics

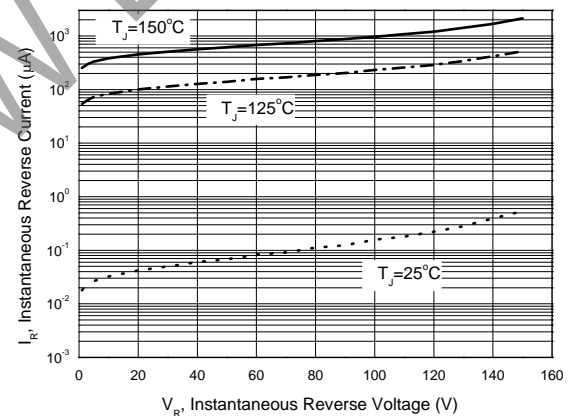
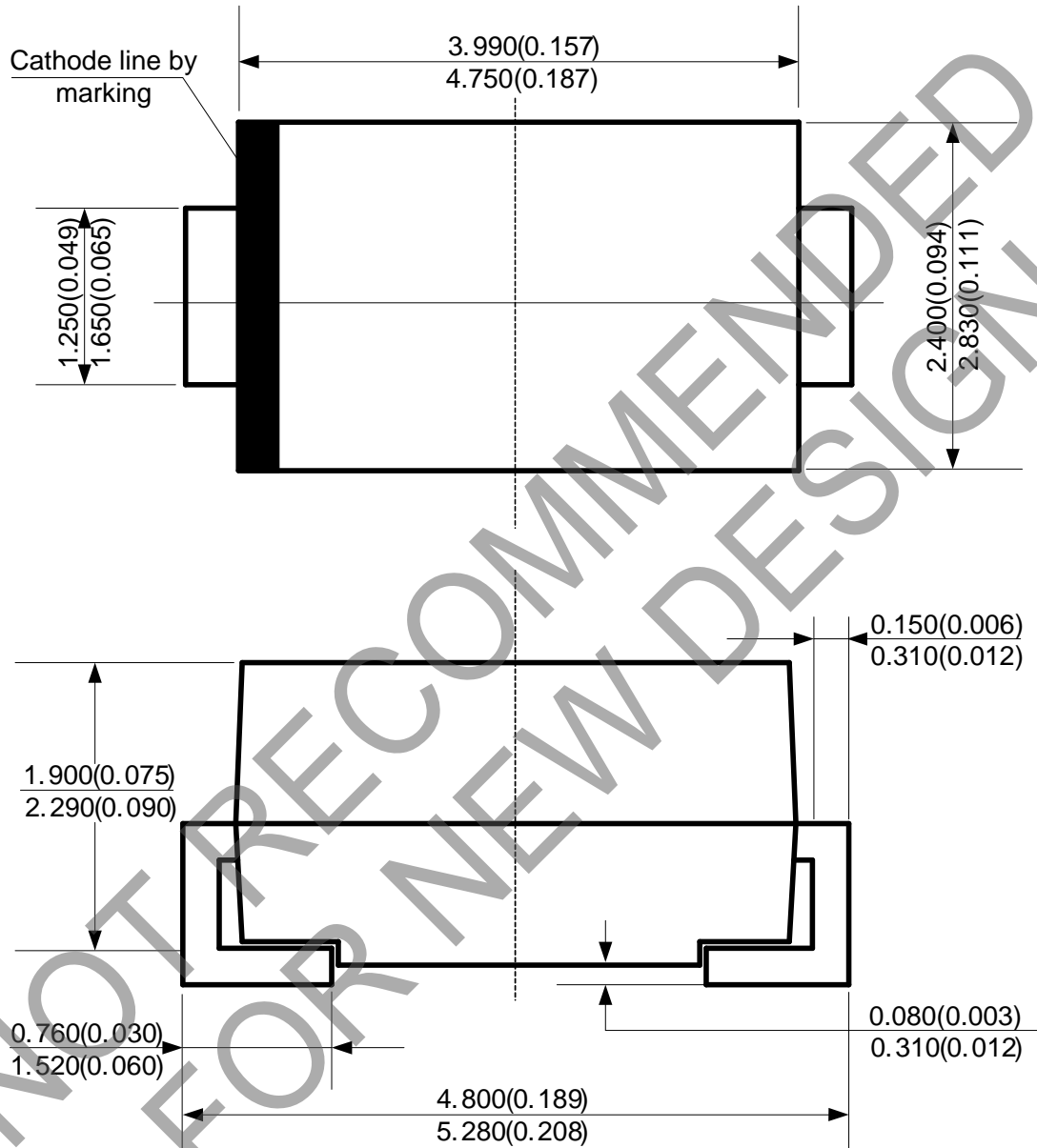


Figure 2. Typical Reverse Characteristics

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

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

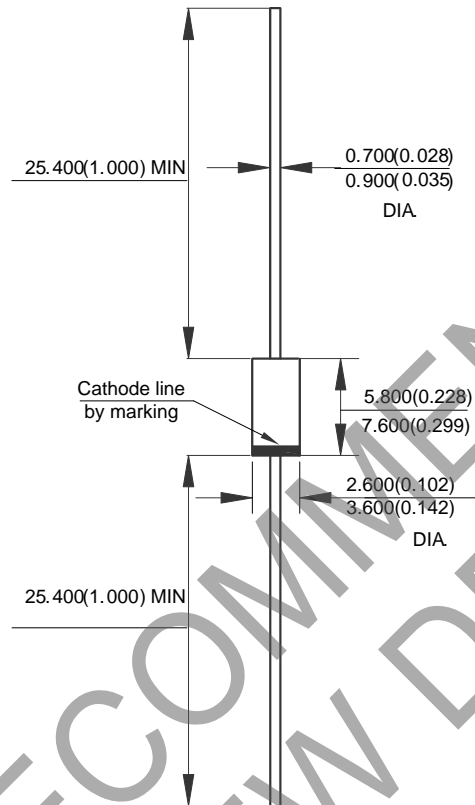
(1) Package Type: DO-214AC



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

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

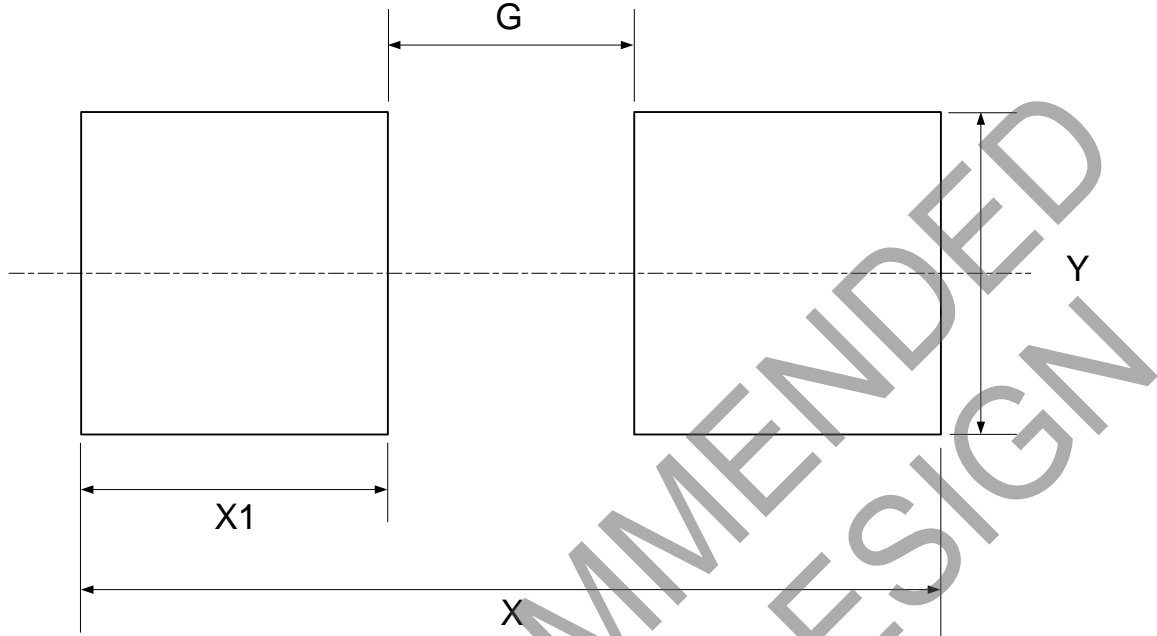
(2) Package Type: DO-15



Suggested Pad Layout

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

(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

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