

Automotive Alternator Super Rectifier Diode  
24V 50A Press Fit Diode

General features:

Order code	VZ@0.1mA	VF@100A	ID	Ir@16V
SPZ50D024G1	24V	0.63V	50P/N	1.0uA

Features

- Low forward voltage
- $T_J = 200\text{ }^\circ\text{C}$  capability suitable for high reliability and automotive requirement
- Low leakage current
- High temperature application
- High surge capability
- RoHS compliant
- Automotive grade (PPAP standard)
- AEC-Q101 qualified.



Applications:

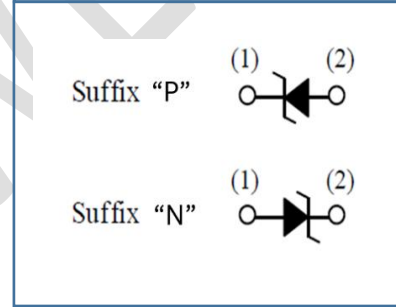
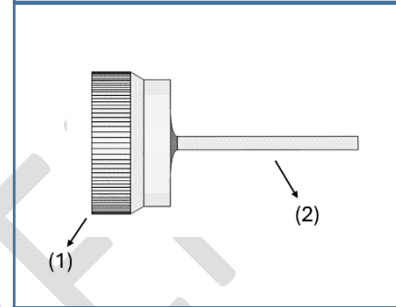
- Alternator circuit for the 12V automotive battery
- Alternator rectifier

Polarity:

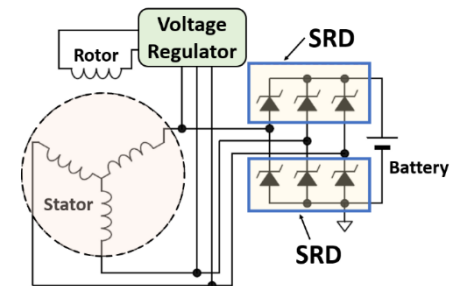
- 50P: Cathode toward to case
- 50N: Anode toward to case

Mechanical Data:

- Case: Press Fit
- Component in accordance with RoHS
- Marking: NA
- Case Material: "Green" Molding compound UL flammability classification rating 94V-0



Pin No.	Suffix "P"	Suffix "N"
(1)	Cathode	Anode
(2)	Anode	Cathode



Ordering code:

Order Code	Package	Base Quantity	Delivery made
SPZ50D024G1-50P	Press Fit	3K	Box (500pcs)
SPZ50D024G1-50N	Press Fit		

\*Carton: 24 Boxes (12Kpcs)

## ABSOLUTE MAXIMUM RATINGS

(Ratings at 25°C ambient temperature unless otherwise specified)

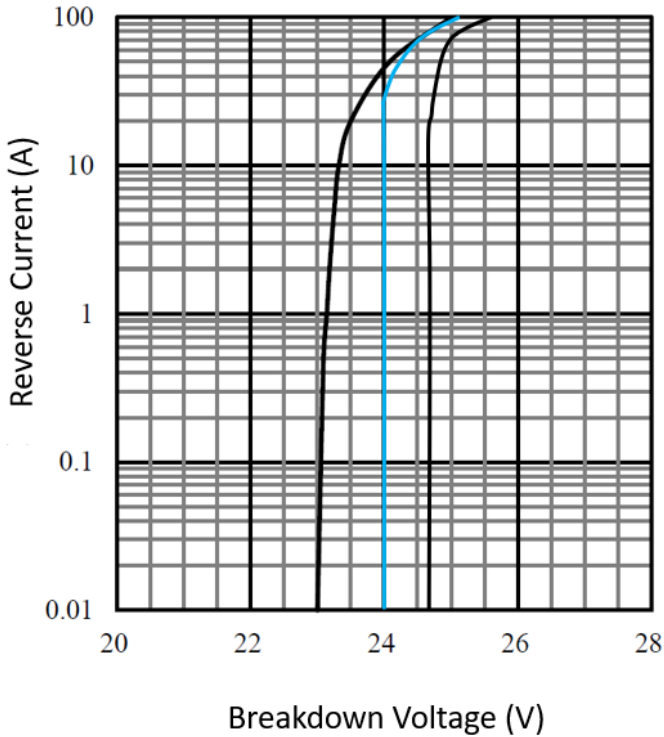
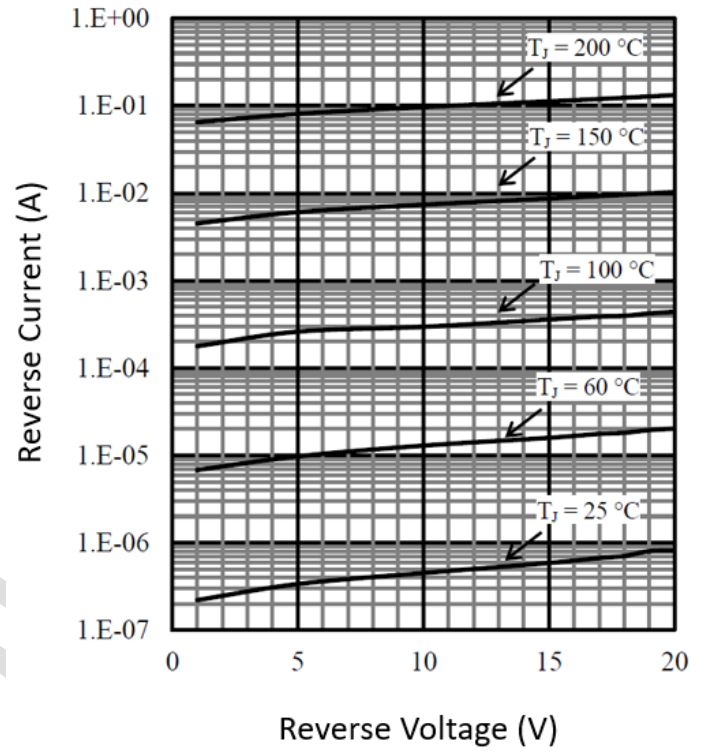
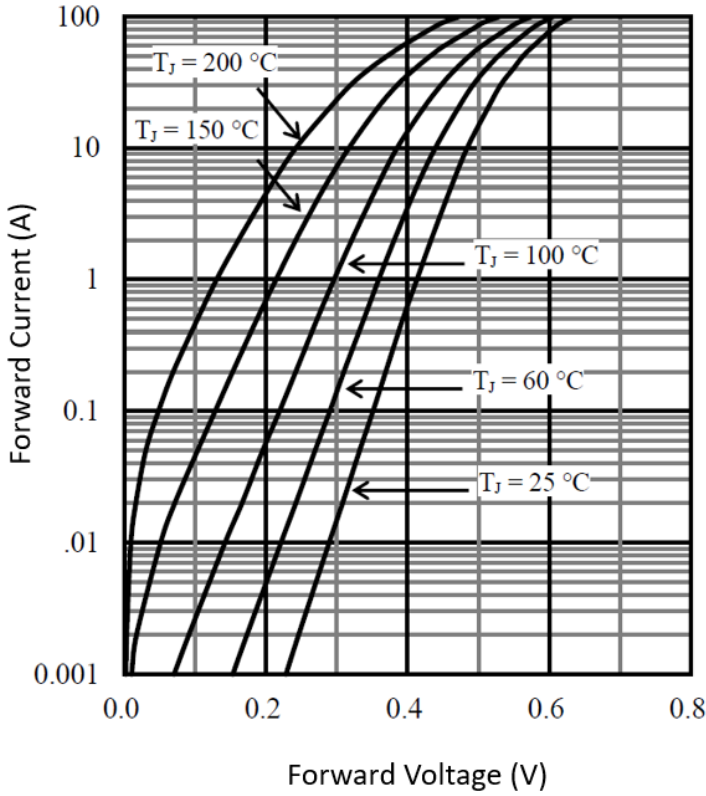
Symbol	Parameter	Ratings	Unit
$V_{BM}$	Repetitive Peak Reverse Voltage	16	V
$I_{F(AV)}$	Average Forward Current	50	A
$I_{FSM}$	Surge Forward Current	500	A
$T_J$	Maximum Junction Temperature	-40~+200	°C
$T_{STG}$	Storage Temperature Range	-40~+200	°C

## ELECTRICAL CHARACTERISTICS OF THE IGBT

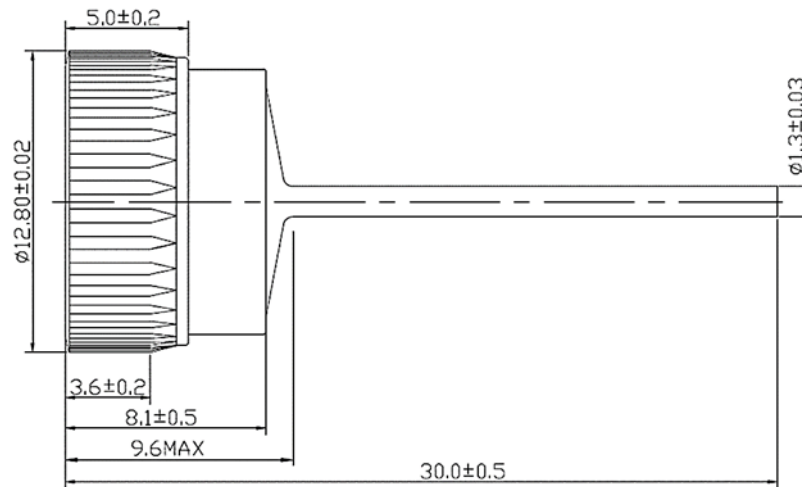
( $T_A = 25^\circ\text{C}$  ambient temperature unless otherwise specified)

Symbol	Parameter and Test Condition	Minimum	Typical	Maximum	Unit
$V_Z$	Reverse Breakdown Voltage	22.0	24.0	26.0	Volt.
$I_F$	Average Rectified Forward Current	-	-	50	Amp
	Maximum Instantaneous Forward Voltage				
$V_F$	At 100 Amperes, $T_a = 25^\circ\text{C}$	-	0.630	0.680	Volt.
	Maximum Instantaneous Reverse Current				
$I_R$	$V_{R1} = 16\text{V}$ , $T_a = 25^\circ\text{C}$	-	1.0	5.0	uA

**Rating and Characteristic Curves**



## Package Outline Dimensions - Press Fit



### NOTES:

1. Dimension and tolerance per ASME Y14.5M, 1994.
2. All dimensions in millimeter (angle in degree).

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