

# High Voltage Rectifier Diode

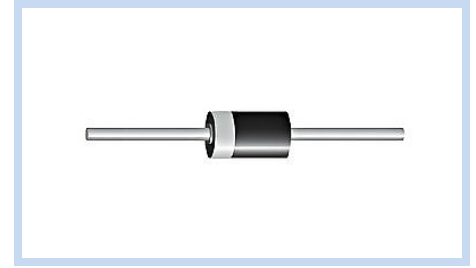
## 9KV~12KV DO-722

2CL3509, 2CL3512

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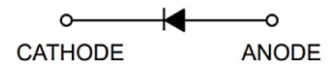
### FEATURE

- High Reverse Voltage Capability
- High Surge Current Resistance
- Fast Recovery Time for High-Frequency Operations
- Engineered for high-voltage rectification and protection



### APPLICATIONS

- Medical Diagnostic Systems: X-Ray, CT and MRI Scanners
- Industrial High-Voltage and High-Power Machinery
- DC HV Power Supply, SCR-Controller Rectifier
- HF AC-to-DC Rectifier, RF and High-Speed Switching



### ELECTRICAL CHARACTERISTICS

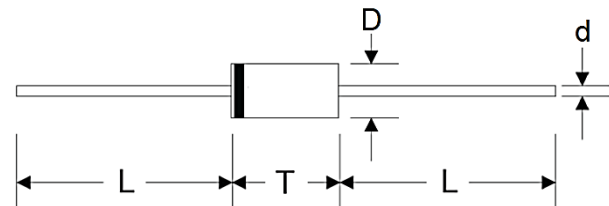
Parameter		Symbol	2CL3509	2CL3512	Unit
Maximum Recurrent Peak Reverse Voltage		$V_{RRM}$	9	12	KV
Maximum Average Forward Rectified Current		$I_{F(AV)}$	350		mA
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rate load		$I_{FSM}$	30		A
Peak Reverse Surge Current, 1ms Rectangular Wave, One-Shot		$I_{RSM}$	100		mA
Maximum Forward Voltage at $I_{FM} = 350mA$		$V_{FM}$	9	10	V
Maximum Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ C$	$I_R$	5		$\mu A$
Avalanche Breakdown Voltage	$I_R = 100\mu A$	$V_{BR}$	$\geq 9.5$	$\geq 12.5$	KV
Operating Junction and Storage Temperature Range		$T_J, T_{STG}$	-40 ~ +130		$^\circ C$

Notes:

1. Ratings at 25°C ambient temperatures unless otherwise specified.
2. Cooling requirement: Cathode terminal is fastened to radiating fin that size is more than 50mm\*50mm\*0.6mm wind-cooled velocity is more than 0.5m/s.

### DIMENSIONS

Item	Min.(mm)	Max. (mm)
D	7.0	8.0
d	1.17	1.23
L	22.0	-
T	21.5	22.5



Note:

1. Case: DO-722, Molded Plastic
2. Epoxy: UL Flammability Classification Rating 94V-0
3. Polarity: Color Band Denotes Cathode End

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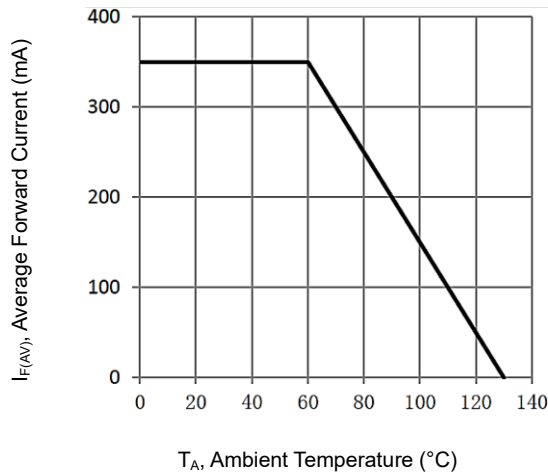
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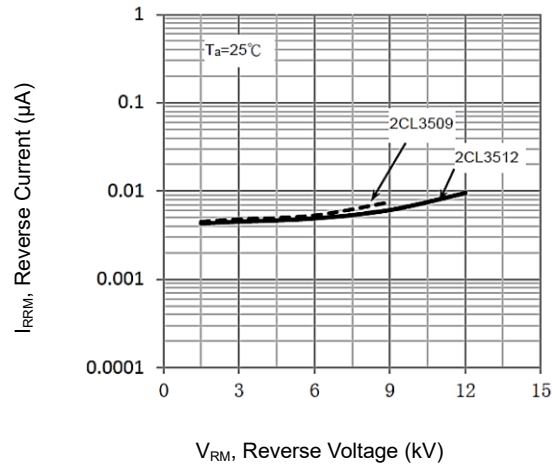
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### CHARACTERISTIC CURVES

Typical Forward Current Derating Curve



Typical Reverse Characteristics



Typical Forward Characteristics

