

High Voltage Rectifier Diode

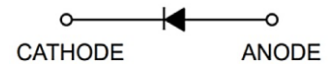
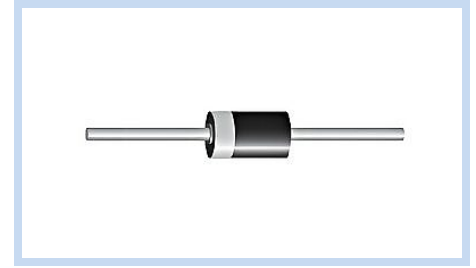
9KV~12KV DO-722

2CL4509, 2CL4512

MERITEK

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 CHATACTERISTICS

Parameter		Symbol	2CL4509	2CL4512	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	9	12	KV
Maximum Average Forward Rectified Current		$I_{F(AV)}$	450		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 $I_{FM}=450mA$		V_{FM}	9	11	V
Maximum Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}C$	I_R	5		μA
Avalanche Breakdown Voltage	$I_R=100\mu A$	V_{BR}	≥ 9.5	≥ 12.5	KV
Operating Junction and Storage Temperature Range		T_J, T_{STG}	$-40 \sim +130$		$^{\circ}C$

Notes:

1. Ratings at $25^{\circ}C$ 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

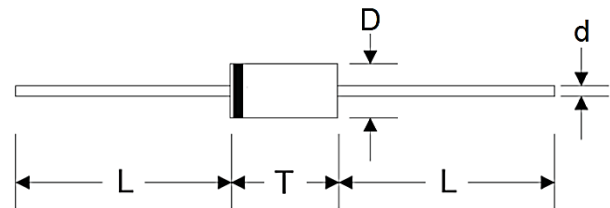
Item	Min.(mm)	Max. (mm)
D	7.0	8.0
d	1.17	1.23
L	22.0	-
T	21.5	22.5

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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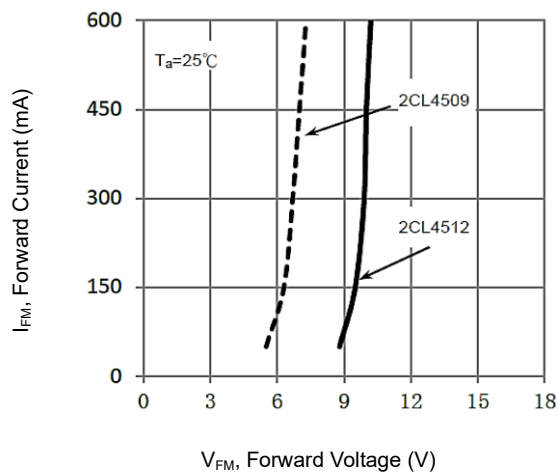
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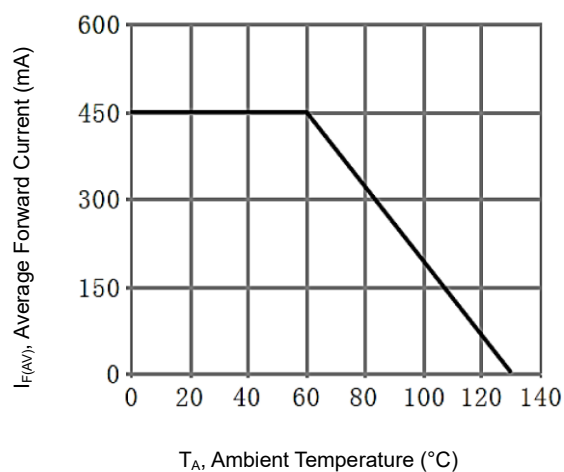
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CHARACTERISTIC CURVES

Typical Forward Characteristics



Typical Forward Current Derating Curve



Typical Reverse Characteristics

