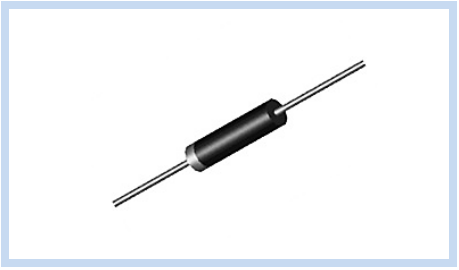
High Voltage Rectifier Diode
9KV~12KV DO-722

2CL3509, 2CL3512

MERITEK

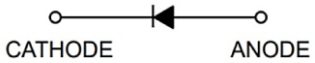
FEATURE

- 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



RoHS

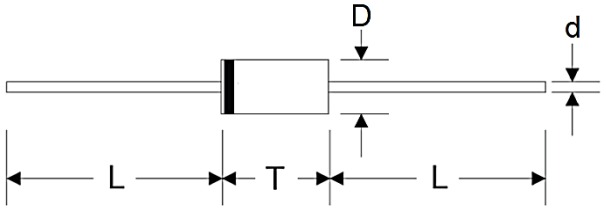
ELECTRICAL CHATACTERISTICS

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°C	I_R	5		μA
Avalanche Breakdown Voltage	I_R=100μA	V_{BR}	≥9.5	≥12.5	KV
Operating Junction and Storage Temperature Range		T_J, T_{STG}	-40 ~ +130		˚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

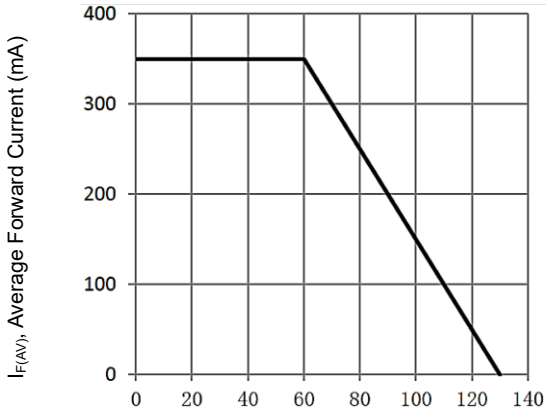
Item	Min.(mm)	Max. (mm)
D	7.0	8.0
d	1.17	1.23
L	22.0	-
T	21.5	22.5



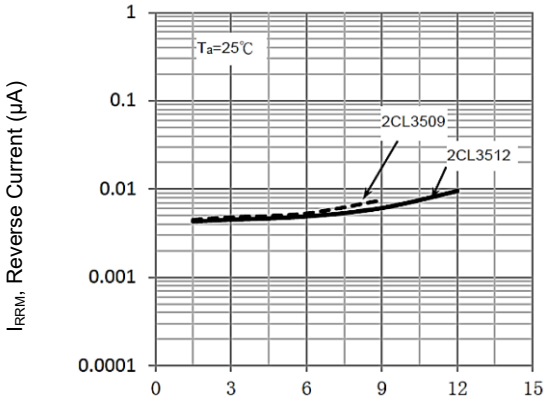
Note:
1. Case: DO-722, Molded Plastic
2. Epoxy: UL Flammability Classification Rating 94V-0
3. Polarity: Color Band Denotes Cathode End

CHARACTERISTIC CURVES

Typical Forward Current Derating Curve



Typical Reverse Characteristics



Typical Forward Characteristics