

High Voltage Rectifier Diode

12KV DO-415

2CLG5012

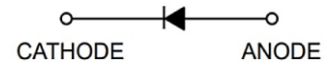
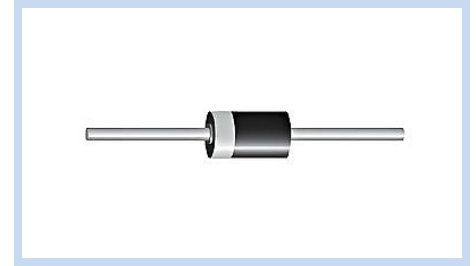
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FEATURE

- 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 CHATACTERISTICS

Parameter		Symbol	2CLG5012	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	12	KV
Maximum Average Forward Rectified Current		$I_{F(AV)}$	500	mA
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rate load		I_{FSM}	30	A
Maximum Forward Voltage at $I_{FM} = 100mA$		V_{FM}	28	V
Maximum Reverse Current at Rated DC Blocking Voltage	$T_A = 25^{\circ}C$	I_R	5	μA
	$T_A = 100^{\circ}C$		50	
Maximum Reverse Recovery Time		t_{rr}	0.15	μs
Operating Junction and Storage Temperature Range		T_J, T_{STG}	-40 ~ +120	$^{\circ}C$

Notes:

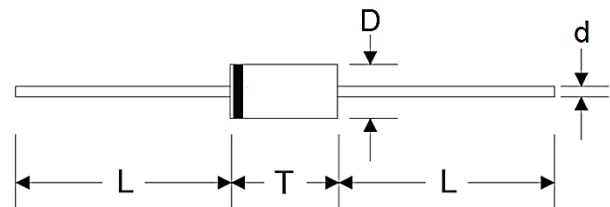
1. Ratings at 25°C ambient temperatures unless otherwise specified.
2. Reverse Recovery Time Test Condition: $I_F = 2mA$, $I_{RM} = 4mA$, $I_{RR} = 1mA$.

DIMENSIONS

Item	Min.(mm)	Max. (mm)
D	4.0	4.4
d	0.77	0.83
L	26.0	-
T	14.8	15.2

Note:

1. Case: DO-415, Molded Plastic
2. Epoxy: UL Flammability Classification Rating 94V-0
3. Polarity: Color Band Denotes Cathode End



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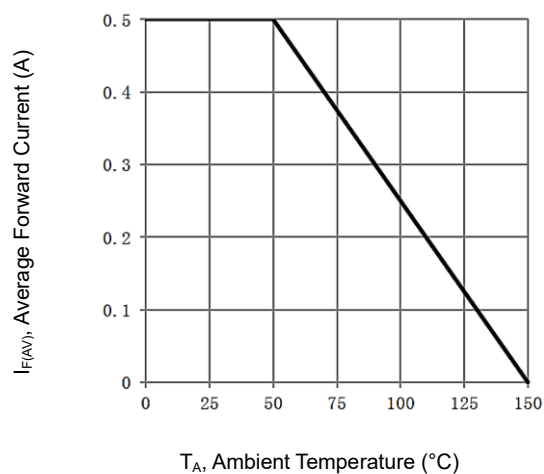
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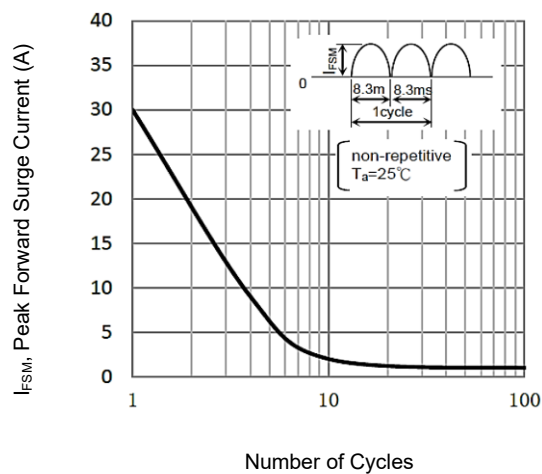
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CHARACTERISTIC CURVES

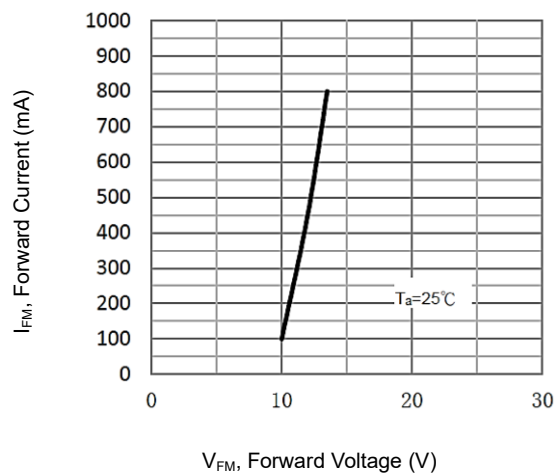
Typical Forward Current Derating Curve



Maximum Non-repetitive Forward Surge Current



Typical Forward Characteristics



Typical Reverse Characteristics

