

■ **Features**

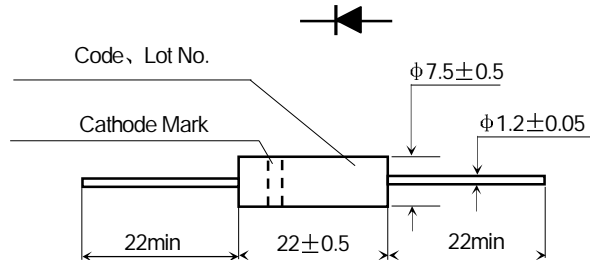
- $I_{F(AV)}$ 350mA
- V_{RRM} 8kV
- High reliability

■ **Applications**

- Rectification for high voltage power supply of magnetron in Micro wave oven and others

■ **Outline Dimensions and Mark**

Unit: mm



Type	Code	Cathode Mark
2CLG3508	TG3508	
2CLG3508(T)	TG3508	

■ **Limiting Values (Absolute Maximum Rating)**

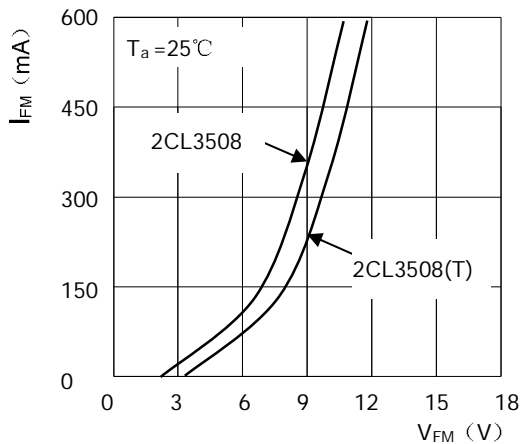
Item	Symbol	Unit	2CLG3508	2CLG3508(T)
Repetitive Peak Reverse Voltage	V_{RRM}	kV	7.5	8
Average Forward Current	$I_{F(AV)}$	mA	350	(50Hz Half-sine wave, Resistance load, $T_a \leq 60^\circ\text{C}$)
Forward Surge Current	I_{FSM}	A	15	(50Hz Half-sine wave, One-shot, $T_a = 25^\circ\text{C}$)
Reverse Surge Current	I_{RSM}	mA	50	($W_p = 1\text{ms}$, Rectangular-wave, One-shot, $T_a = 25^\circ\text{C}$)
virtual Junction Temperature	$T_{(vj)}$	$^\circ\text{C}$	120	
Storage Temperature	T_{stg}	$^\circ\text{C}$	-40 ~ +130	

*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

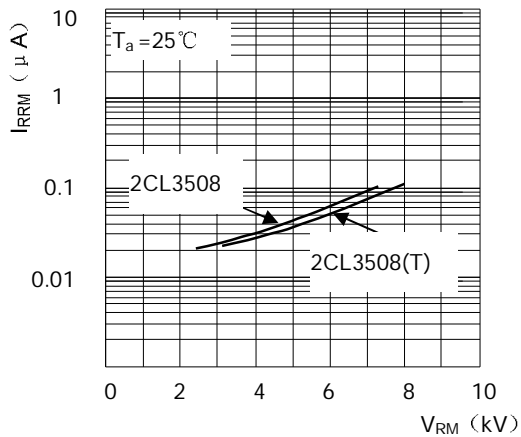
■ **Electrical Characteristics** ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	2CLG3508	2CLG3508(T)
Peak Forward Voltage	V_{FM}	V	$I_{FM} = 350\text{mA}$	≤ 13.5	≤ 14.0
Peak Reverse Current	I_{RRM1}	μA	$V_{RM} = V_{RRM}$	≤ 10	
Reverse Recovery Time	trr	μs	$I_F = 100\text{mA}$, $I_R = 100\text{mA}$ 90% Recover	≤ 0.15	
Avalanche Breakdown Voltage	$V_{(BR)}$	kV	$I_R = 100\mu\text{A}$	≥ 7.6	≥ 8.5

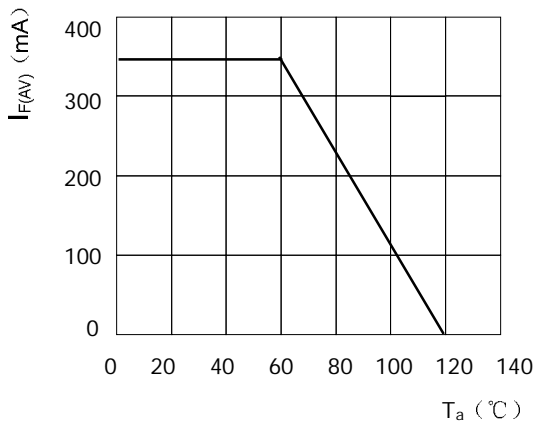
■ **Characteristics(Typical)**



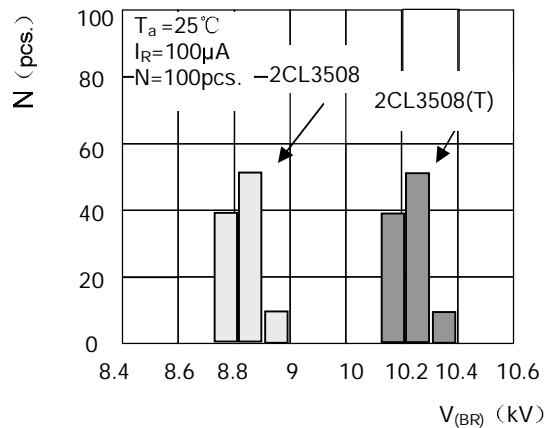
Forward Characteristics



Reverse Characteristics

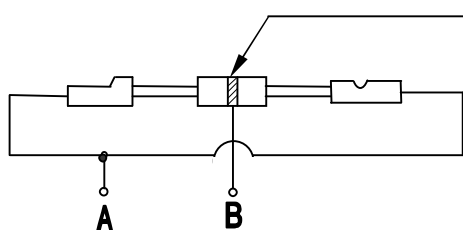


$I_{F(AV)} - T_a$ Derating



Breakdown Voltage Distribution

● **Safety Test**



3mm Wide metal film is rolled on the surface middle of diode body

1. Insulation Resistance Test: 500V DC voltage is added between A and B. The measurement by insulation resistance meter is big than 1000M Ω .

2. Resistance To Voltage Strength Test: 15kV half-sine wave voltage is added between A and B for one minute and no breakdown or arc in insulation oil.