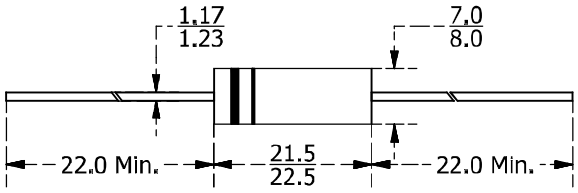
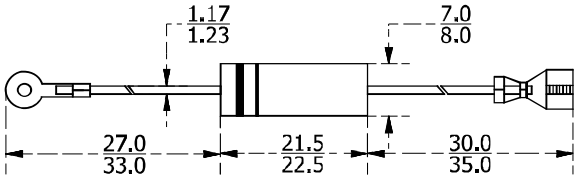
High Voltage Silicon Diodes
2CL3520HR(T)

2CL3520HR (Standard type)



2CL3520HR**T** (Terminal type)



Dimensions in Millimeters

Suffix "**T**" indicates as terminal type

Features

- $I_{F(AV)}$ 350mA
- V_{RRM} 20KV
- High reliability

Applications

Rectification for high voltage power supply of magnetron in microwave oven and others

Mechanical Data

- Case: Molded plastic body
- Epoxy meets UL 94V-0 flammability rating
- Terminals: Pure time plated leads, solderable per J-STD-002 and JESD22-B102, meet JESD201 class 1A whisker test.
- Polarity: Color band denotes cathode end

Maximum rating (Ta=25°C unless otherwise noted)

Parameter		Symbol	2CL3520HR(T)	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	20	KV
Maximum RMS voltage		V_{RMS}	14	KV
Average forward current	60Hz half sine wave, R-load, Ta≦60 °C	$I_{F(AV)}$	350	mA
Peak forward surge current	60Hz half sine wave, 1 cycle	I_{FSM}	30	A
Reverse surge current		I_{RSM}	100	mA
Maximum instantaneous forward voltage at I_F=350mA		V_{FM}	12	V
Maximum reverse current , $V_{RM}=V_{RRM}$		I_{RRM}	5	μA
Reverse recovery time		trr	150	nS
Virtual junction temperature		$T_{(vj)}$	-40 ~ +130	°C
Storage temperature range		T_{stg}	-40 ~ +130	°C

Notes: Cooling Requirement – Cathode terminal is fastened to radiating fin that size is more than 50mm x 50mm x50mm Wind-cooled velocity is more than 0.5m/s

Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

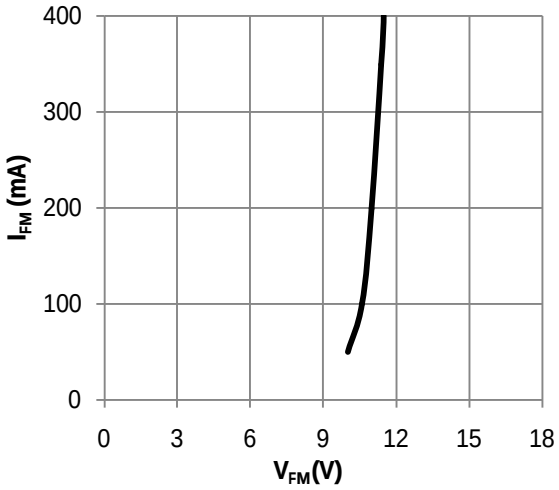


Figure 1. Forward Characteristics

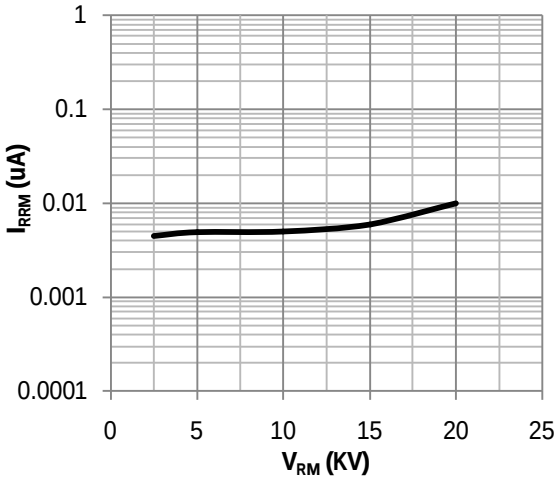


Figure 2. Reverse Characteristics

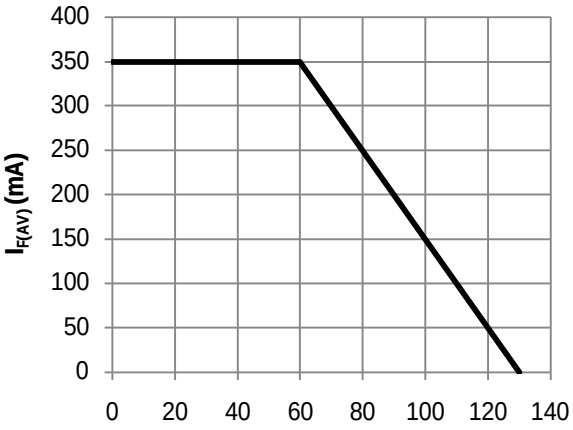
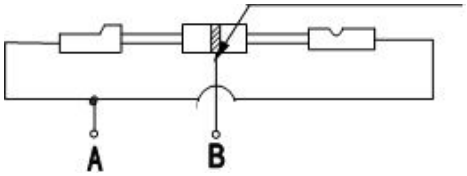


Figure 3. Forward Current Derating Curve

Safety Test

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



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

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