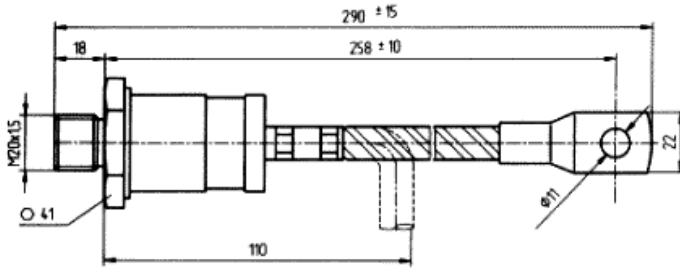


# GSD63034

## FAST RECOVERY STUD DIODE

UL-certified insulating sleeve



**VOLTAGE UP TO** 3000 V  
**AVERAGE CURRENT** 340 A  
**SURGE CURRENT** 4.5 kA

### BLOCKING CHARACTERISTICS

Characteristic	Conditions	Value
V <sub>RRM</sub>	Repetitive peak reverse voltage	3000 V
V <sub>RSM</sub>	Non-repetitive peak reverse voltage	3100 V
I <sub>RRM</sub>	Repetitive peak reverse current, max.	V <sub>RRM</sub> , single phase, half wave, T <sub>j</sub> = T <sub>jmax</sub>
		50 mA

### FORWARD CHARACTERISTICS

I <sub>F(AV)</sub>	Average forward current	Sine wave, 180° conduction, T <sub>c</sub> = 85 °C	340 A
I <sub>F(RMS)</sub>	R.M.S. forward current	Sine wave, 180° conduction, T <sub>c</sub> = 85 °C	534 A
I <sub>FSM</sub>	Surge forward current	Non rep. half sine wave, 50 Hz, V <sub>R</sub> = 0 V, T <sub>j</sub> = T <sub>jmax</sub>	4.5 kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination		101 kA <sup>2</sup> s
V <sub>F(TO)</sub>	Threshold voltage	T <sub>j</sub> = T <sub>jmax</sub>	0.84 V
r <sub>F</sub>	Forward slope resistance	T <sub>j</sub> = T <sub>jmax</sub>	1.53 mΩ
V <sub>FM</sub>	Peak forward voltage, max	Forward current I <sub>F</sub> = 780 A, T <sub>j</sub> = 25°C	1.8 V

### SWITCHING CHARACTERISTICS

t <sub>rr</sub>	Reverse recovery time, typ		μs
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### THERMAL AND MECHANICAL CHARACTERISTICS

R <sub>th(j-c)</sub>	Thermal resistance (junction to case)	Double side cooled	0.12 °C/W
R <sub>th(c-h)</sub>	Thermal resistance (case to heatsink)	Double side cooled	0.05 °C/W
T <sub>jmax</sub>	Max operating junction temperature		160 °C
T <sub>stg</sub>	Storage temperature		-40 / 160 °C
M	Mounting torque		50 N·m
	Mass		250 g

### Ordering information

cathode on stud	anode on stud	
GSD63034-vv	GSDR63034-vv	vv = V <sub>RRM</sub> /100
example GSD63034-28	2800 V cathode on stud	