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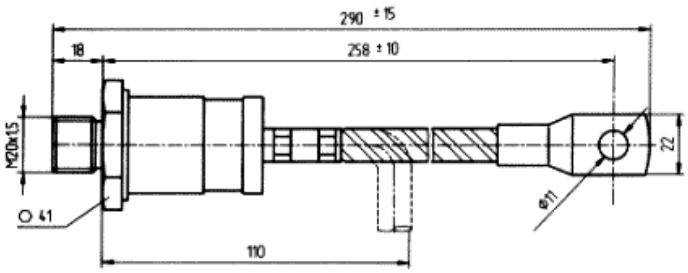

GSD63034

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_{RRM}	Repetitive peak reverse voltage		3000	V
V_{RSM}	Non-repetitive peak reverse voltage		3100	V
I_{RRM}	Repetitive peak reverse current, max.	V_{RRM}, single phase, half wave, Tj = Tjmax	50	mA

FORWARD CHARACTERISTICS

$I_{F(AV)}$	Average forward current	Sine wave,180° conduction, Tc = 85 °C	340	A
$I_{F(RMS)}$	R.M.S. forward current	Sine wave,180° conduction, Tc = 85 °C	534	A
I_{FSM}	Surge forward current	Non rep. half sine wave, 50 Hz, V_R = 0 V, $T_j = T_{jmax}$	4.5	kA
I^2t	I^2 t for fusing coordination		101	kA^2s
$V_{F(TO)}$	Threshold voltage	$T_j = T_{jmax}$	0.84	V
r_F	Forward slope resistance	$T_j = T_{jmax}$	1.53	mΩ
V_{FM}	Peak forward voltage, max	Forward current I_F = 780 A, Tj = 25°C	1.8	V

SWITCHING CHARACTERISTICS

t_{rr}	Rverse recovery time, typ			µs

THERMAL AND MECHANICAL CHARACTERISTICS

$R_{th(j-c)}$	Thermal resistance (junction to case)	Double side cooled	0.12	°C/W
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Double side cooled	0.05	°C/W
T_{jmax}	Max operating junction temperature		160	°C
T_{stg}	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_{RRM}/100
example	GSD63034-28	2800 V cathode on stud