



GSD32015

RECTIFIER DIODE

VOLTAGE UP TO	1600 V
AVERAGE CURRENT	150 A
SURGE CURRENT	2.85 kA

Cathode on base (Standard) - Anode on base (Reverse)

Symbol	A	B	C	D	E	F	G	H	L	M	N
Inches	4.07	1.426	.64	.745	.233	.437	1.06	1.166	.85	3/8-24 UNF	1/4-28 UNF
mm	10.33	36.22	16.25	18.92	5.66	11.09	26.92	29.61	21.59		

BLOCKING CHARACTERISTICS

Characteristic	Conditions	Value
VRRM	Repetitive peak reverse voltage	1600 V
VRSM	Non-repetitive peak reverse voltage	1700 V
IRRM	Repetitive peak reverse current, max.	VRRM, single phase, half wave, Tj = Tjmax
		10 mA

FORWARD CHARACTERISTICS

IF(AV)	Average forward current	Sine wave, 180° conduction, Tc = 120°C	150 A
IF(RMS)	R.M.S. forward current	Sine wave, 180° conduction, Tc = 120°C	236 A
IFSM	Surge forward current	Non rep. half sine wave, 50 Hz, VR = 0 V, Tj = Tjmax	2.85 kA
I²t	I² t for fusing coordination		34.0 kA²s
VF(TO)	Threshold voltage	Tj = Tjmax	0.9 V
rF	Forward slope resistance	Tj = Tjmax	0.65 mΩ
VFM	Peak forward voltage, max	Forward current IF = 300 A, Tj = Tjmax	1.10 V

SWITCHING CHARACTERISTICS

Qrr	Reverse recovery charge	Tj = Tjmax, IF = A, tp = μs, di/dt = A/μs	μC
Irr	Reverse recovery current	VR = V, dV/dt = V/μs	A
trr	Reverse recovery time		μs
VFP	Forward recovery voltage	Tj = Tjmax, di/dt = A/μs	V

THERMAL AND MECHANICAL CHARACTERISTICS

Rth(j-c)	Thermal resistance (junction to case)	Double side cooled	0.35 °C/W
Rth(c-h)	Thermal resistance (case to heatsink)	Double side cooled	0.08 °C/W
Tjmax	Max operating junction temperature		180 °C
Tstg	Storage temperature		-65 / 180 °C
M	Mounting torque		10 N·m
	Mass		100 g