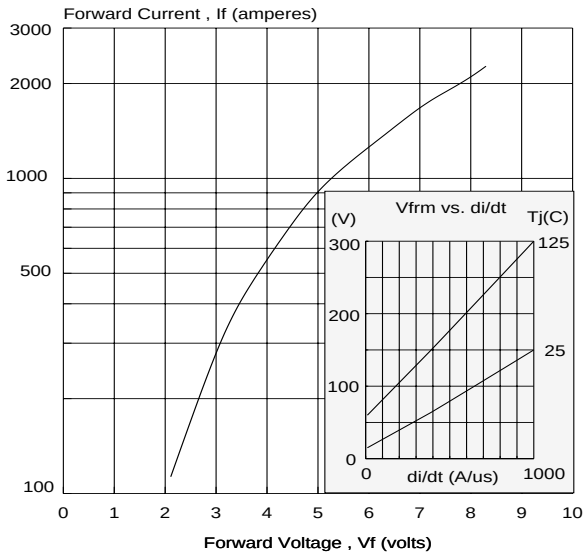
Southern States

Powers the Future

SDD67HK
40mm Fast Recovery DIODE
300A / 4500V

The SDD67HK fast recovery diode is designed as a parallel mate for GTO's used in voltage fed inverter circuits normally requiring the bypass function. Its relatively low recovery current and charge in combination with low thermal resistance offer a new advantage for optimizing other circuit components. It is manufactured by the proven multi-diffusion process with 40mm diameter silicon and is supplied in a disc-type package ready to mount using commercially available heat dissipators and clamping hardware.

FORWARD CHARACTERISTIC
Process Maximum @ Tj=125 C



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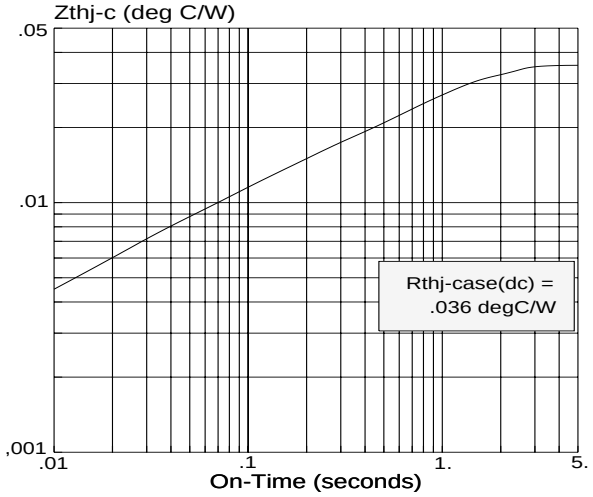
THERMAL IMPEDANCE vs. ON-TIME

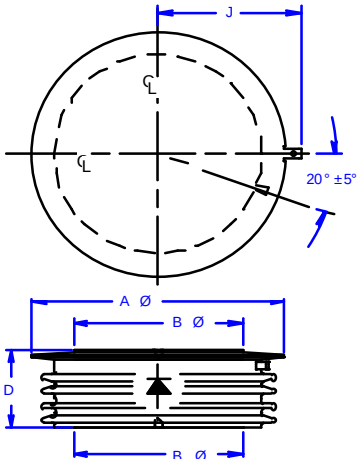


MAXIMUM RATINGS & PARAMETERS

Maximum repetitive peak reverse voltage	V_{RRM}	T_J = -40 to +125°C	to 4500	V
Maximum forward average & RMS current ratings	$I_{F(AV)}$	T_{case} 70°C	300	A
	I_{RMS}		470	
Maximum reverse leakage current	I_{RRM}		75	ma
Forward voltage drop	V_{FM}	I_T=1000A t_p=8.3ms T_J=125°C	5.30	V
Maximum peak recovery current*	I_{RR}	@ 50 A/us	120	A
		@ 100 A/us	200	
Maximum recovery charge *	Q_{RR}	@ 50 A/us	290	uC
		@100A/us	400	
Typical recovery time and snap factor	t_{RR}		4	us
			0.5	

*(tested with 3uF GTO snubber)

MECHANICAL OUTLINE



AF = 2.30 in (58.0 mm)
BF = 1.35 in (34.3 mm)
D= 1.04 in (26.4 mm)

CLAMPING FORCE REQUIRED
2500 - 4200 lb / 11.1 - 18.7 kN