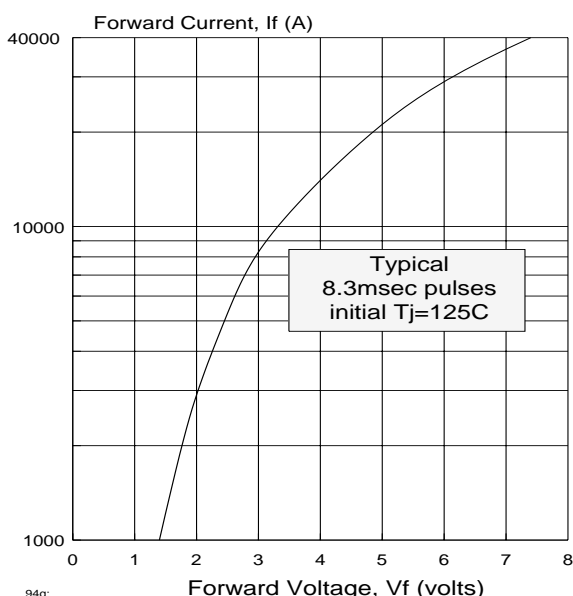
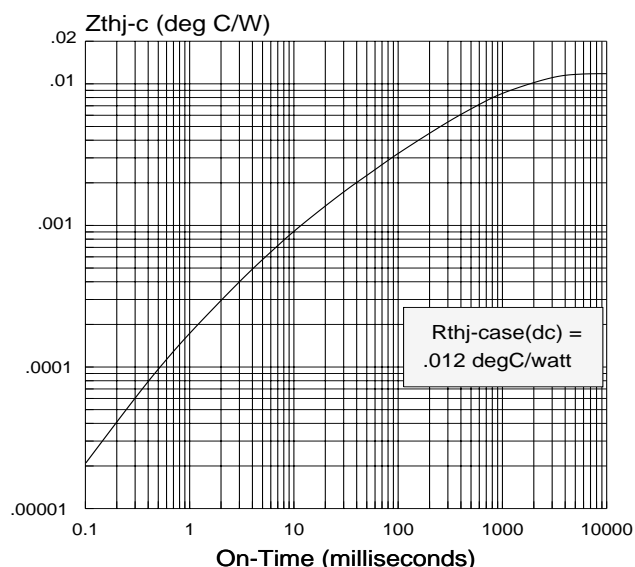


The SDD216 fast recovery diode is designed for use in voltage fed inverter circuits normally requiring the bypass function. Its relatively low recovery current and charge in combination with low thermal resistance offer a new advantage for optimizing other circuit components. It is manufactured by the proven multi-diffusion process with 77mm diameter silicon and is supplied in a disc-type package ready to mount using commercially available heat dissipators and clamping hardware.

FORWARD CONDUCTION CHARACTERISTIC



THERMAL IMPEDANCE vs. ON-TIME



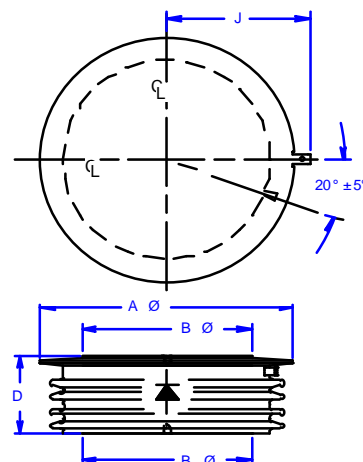
MAXIMUM RATINGS & PARAMETERS

Maximum repetitive peak reverse voltage	V_{RRM}	$T_J = 0$ to $+125^\circ\text{C}$	to 2500	V
Maximum forward average & RMS current ratings	$I_{F(AV)}$ I_{RMS}	$T_{case} 70^\circ\text{C}$	1850 2900	A
Maximum reverse leakage current	I_{RRM}		200	ma
Forward voltage drop	V_{FM}	$I_T=2000\text{A}$ $t_p=8.3\text{ms}$ $T_J=125^\circ\text{C}$	1.75	V
Maximum peak recovery current*	I_{RR}	@ 10 A/us @ 100 A/us	40 300	A
Maximum recovery charge	Q_{RR}	@ 10 A/us @ 100A/us	128 720	uC

SELECTION TABLE

MODEL	V_{RRM} $T_J = 0 \text{ to } 125^\circ\text{C}$
SDD216DK	2500 volts
SDD216TT	2000

MECHANICAL OUTLINE



$A\Phi = 4.35 \text{ in (110.5 mm)}$
 $B\Phi = 2.88 \text{ in (73.2 mm)}$
 $D = 1.07 \text{ in (27.2 mm)}$

CLAMPING FORCE REQUIRED
 7000 - 9000 lb / 31.1 - 40.0 kN