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.

**MAXIMUM RATINGS & PARAMETERS**

- **Maximum repetitive peak reverse voltage**
  - $V_{rrm}$
  - $T_{j} = -40$ to $+125^\circ$C
  - $V_{rrm} = 4500$ V

- **Maximum forward average & RMS current ratings**
  - $I_{av}$
  - $T_{j} = 70^\circ$C
  - $I_{av} = 470$ A

- **Maximum reverse leakage current**
  - $I_{leak}$
  - $75$ mA

- **Forward voltage drop**
  - $V_{f}$
  - $I = 1000$ A
  - $t_{r,50} = 8.3$ ms
  - $T_{j} = 125^\circ$C
  - $V_{f} = 5.30$ V

- **Maximum peak recovery current**
  - $I_{r}$
  - $50$ A/us
  - $120$ A

- **Maximum recovery charge**
  - $Q_{r}$
  - $50$ A/us
  - $290$ uC

- **Typical recovery time**
  - $t_{r}$
  - $4$ us

- **Snap factor**
  - $0.5$

*(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