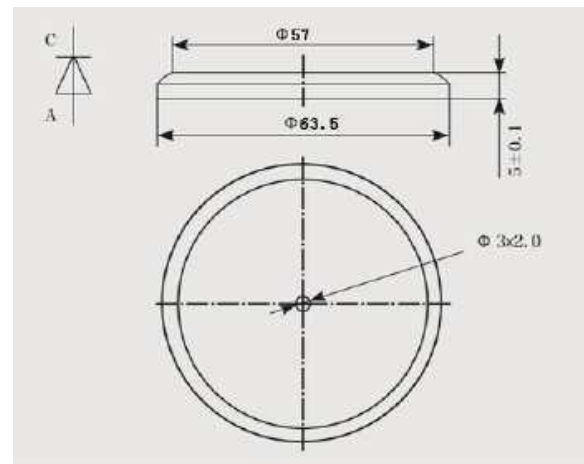


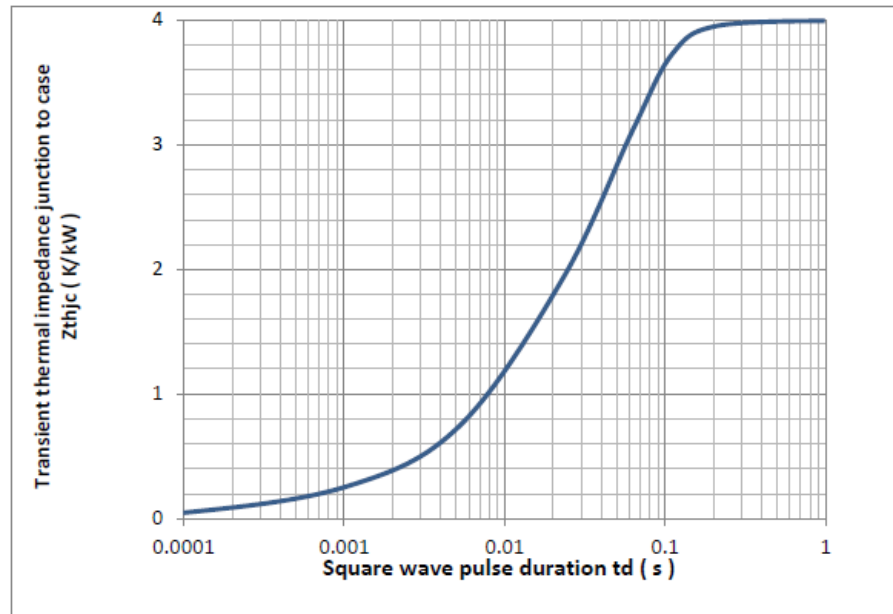
SCD13500

Housingless Diode



Features

- Optimized for high current rectifiers
- Very low threshold voltage and slope resistance
- Very low thermal resistance
- Direct paralleling
- Direct apply 2KHz



BLOCKING

Symbol	Characteristic	Conditions	T _j (°C)	Value	Unit
V _{RRM}	Repetitive peak reverse voltage	Half sine wave, T _p =10ms f=50Hz		200-400	V
I _{RRM}	Repetitive peak reverse current	V= V _{RRM}	175	75	mA

CONDUCTING

I _{F(AVM)}	Mean forward current	Half sine wave, T _c =85°C		13500	A
I _{FRMS}	Max RMS on-state current	Half sine wave, T _c =85°C		21200	A
I _{FSM}	Max peak non-repetitive current	t _p =10ms, T _j =175°C V _r ~0V		85000	A
I ² t	Max surge current integral			36000K	A ² s
V _F	Maximum on-state voltage	I _F = 10000A	25	0.92±0.97	V
V _{FO}	Threshold voltage	I _F = 10-30KA	175	0.76	V
r _F	Forward slope resistance	I _F = 10-30KA	175	0.021	mΩ

MOUNTING

R _{th(j-c)}	Thermal impedance, sin 180°	Junction to case		≤4.0K	K/W
R _{th(c-h)}	Thermal impedance	Case to heatsink		≤2.0K	K/W
T _j	Max. junction temperature			-40 175	°C
T _{stg}	Storage temperature			-40 175	°C
M	Mounting torque			55±80	KN
W	Weight (Approx.)			160	g