

# SanRex®

## Thyristor/Thyristor Thyristor/Diode

$I_{T(AV)} = 200A$ ,  $V_{RRM} = 800 - 1800V$

SanRex Thyristor/Thyristor (**SCA series**), Thyristor/Diode (**SCE series**) are designed for general purpose high voltage applications. **The modules are an Isolated Industrial Standard Package.**

### Features

- \* Glass-passivated Junctions Feature
- \* High Surge Current ( $I_{TSM}=6500A$ )
- \* Low On-State Voltage Drop ( $V_{TM}=1.4V$ )
- \* UL E76102 approved
- \* RoHS compliance

### Typical Applications

- \* Welders
- \* Uninterruptible Power Supplies (UPS)
- \* Temperature and Lighting Controls
- \* Soft Starters
- \* Battery Chargers

< Maximum Ratings >

$T_j = 25^\circ C$  (unless otherwise noted) per diode

Symbol	Item	Ratings				Unit
		SCA200AA80 SCE200AA80	SCA200AA120 SCE200AA120	SCA200AA160 SCE200AA160	SCA200AA180 SCE200AA180	
$V_{RRM}$	Repetitive Peak Reverse Voltage	800	1200	1600	1800	V
$V_{RSM}$	Non-Repetitive Peak Reverse Voltage	960	1300	1700	1900	V
$V_{DRM}$	Repetitive Peak Off-state Voltage	800	1200	1600	1800	V
$I_{T(AV)}$	Average On-state Current	$T_C = 82^\circ C$			200	A
$I_{T(RMS)}$	R.M.S. On-state Current	$T_C = 82^\circ C$			314	A
$I_{TSM}$	Surge On-state Current	1/2 cycle, 50Hz/60Hz, Peak value, Non-repetitive			6000/6500	A
$I^2 t$	$I^2 t$ (for fusing)	Value for one cycle surge current			180000	$A^2 s$
$P_{GM}$	Peak Gate Power Dissipation				10	W
$P_{G(AV)}$	Average Gate Power Dissipation				3	W
$I_{FGM}$	Peak Gate Current				3	A
$V_{FGM}$	Peak Gate Voltage (Forward)				10	V
$V_{RGM}$	Peak Gate Voltage (Reverse)				5	V
$di/dt$	Critical Rate of Rise of On-state Current	$I_G=100mA$ , $V_D=1/2V_{DRM}$ , $dig/dt=0.1A/$				