

SCD2,5.3000-1350

Power Rectifier Diodes

STANDARD RECOVERY DIODE APPLICATIONS

Features:

- Wide current range
- High surge current capabilities
- Stud cathode and stud anode version

Typical Applications:

- Converters
- Power supplies
- Machine tool controls
- Battery charges

Forward Conduction

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Repetitive peak reverse voltage	V_{RRM}	8000			V	
Non repetitive peak reverse voltage	V_{RSM}	8100			V	
Max. average forward current	$I_{F(AV)}$		2.5		A	Sinewave, 180° conduction, $T_c=50^\circ\text{C}$
Max. RMS forward current	$I_{F(RMS)}$		-		A	Nominal value
Max. peak, one-cycle forward, non-repetitive surge current	I_{FSM}		200		A	10.0 msec (50Hz), sinusoidal wave-shape, 180° conduction, $T_j = 50^\circ\text{C}$
Maximum I^2t for fusing	I^2t		200		A ² s	
Max. forward voltage drop	V_{FM}		6.00		V	$I_{TM} = 2.5\text{A}; T_{vj} = 25^\circ\text{C}$
Threshold voltage	V_{F0}		-		V	
Rated DC Voltage	V_{RD}		1350		V	
Alternate input voltage	V_{VRMS}		3000		V	

Thermal and Mechanical Specifications

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Leakage current	I_R		1		mA	$T_j = 150^\circ\text{C}$
Operating temperature	T_j	-40	+150		°C	
Storage temperature	T_{stg}	-40	+150		°C	
Thermal resistance - junction to case	$R_{\theta(j-c)}$		-		K/W	
Thermal resistance - case to heatsink	$R_{\theta(c-s)}$		-		K/W	
Mounting force	P	-	8		Nm	$\pm 10\%$
Weight	W	-	-	115	g	
Case style				-		See Outline Table

CASE OUTLINE AND DIMENSIONS