

Semicell Diode

SKN Tabl. 30 N / 2S

$I_F = 620 \text{ A}$

$V_{RRM} = 1800 \text{ V}$

Size: diameter : 29 mm

Package: tray

Features

- high current density
- small footprint

Typical Applications

- uncontrolled rectifiers for AC / AC converters
- field supply for DC motors

Absolute Maximum Ratings

Symbol	Conditions	Values	Units
V_{RRM}	$T_{vj} = 25^\circ\text{C}, I_R = 0,8 \text{ mA}$	1800	V
$I_{F(AV)}$	$T_c = 80^\circ\text{C}, T_{vjmax} = 150^\circ\text{C}$	510	A
I^2t	$T_{vjmax} = 150^\circ\text{C}, 10 \text{ ms, half sine wave}$	9100	A^2s
I_{FSM}	$T_{vj} = 25^\circ\text{C}, 10 \text{ ms, half sine wave}$		A
	$T_{vjmax} = 150^\circ\text{C}, 10 \text{ ms, half sine wave}$		A
T_{vjmax}		+ 150	$^\circ\text{C}$

Electrical Characteristics

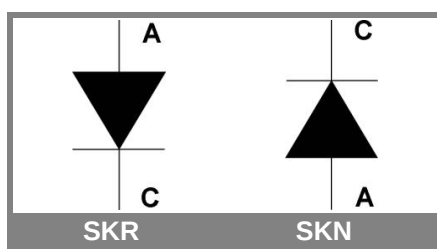
Symbol	Conditions	min.	typ.	max.	Units
I_R	$T_{vj} = 25^\circ\text{C}, V_{RRM}$			0,8	mA
	$T_{vj} = 145^\circ\text{C}, V_{RRM}$			5,5	mA
V_F	$T_{vj} = 25^\circ\text{C}, I_F = 750 \text{ A}$		1,15		V
	$T_{vj} = 125^\circ\text{C}, I_F = 750 \text{ A}$				V
$V_{(TO)}$	$T_{vj} = 150^\circ\text{C},$		0,8		V
r_T	$T_{vj} = 150^\circ\text{C},$		0,35		$\text{m}\Omega$
t_{rr}	$T_{vj} = 25^\circ\text{C}, \pm 1 \text{ A}$				μs

Thermal Characteristics

Symbol	Conditions	min.	typ.	max.	Units
T_{vj}		- 40		+ 150	$^\circ\text{C}$
T_{stg}		- 40		+ 150	$^\circ\text{C}$
T_{solder}	10 min			+ 250	$^\circ\text{C}$
T_{solder}	5 min			+ 320	$^\circ\text{C}$
$R_{th(j-c)}$			0,11		K / W

Mechanical Characteristics

Parameter		Units
raster size	diameter : 29	mm
Area total	660	mm^2
Chips / Tray	5	pcs
Anode metallisation	solderable or pressure contact	
Cathode metallisation	solderable or pressure contact	
wire bond		



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