

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

### Electrical Characteristics

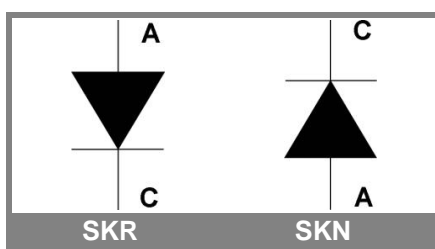
Symbol	Conditions	min.	typ.	max.	Units
$I_R$	$T_{vj} = 25 \text{ }^\circ\text{C}, V_{RRM}$ $T_{vj} = 145 \text{ }^\circ\text{C}, V_{RRM}$			0,8 5,5	mA mA
$V_F$	$T_{vj} = 25 \text{ }^\circ\text{C}, I_F = 750 \text{ A}$ $T_{vj} = 125 \text{ }^\circ\text{C}, I_F = 750 \text{ A}$		1,15		V V
$V_{(TO)}$	$T_{vj}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

### 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 $\text{mm}^2$
Chips / Tray	5 pcs
Anode metallisation	solderable or pressure contact
Cathode metallisation	solderable or pressure contact
wire bond	



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