

### **Dual Power Schottky** Diode

in ISOPLUS i4-PAC<sup>™</sup>

Conditions

 $T_c = 25^{\circ}C$ 

Conditions

(per diode)

 $T_{c} = 90^{\circ}C$ ; sine 180°

 $I_{F} = 75 \text{ A}; T_{VJ} = 25^{\circ}\text{C}$ 

 $V_R = V_{RRM}; T_{VJ} = 25^{\circ}C$ 

 $T_{VJ} = 125^{\circ}C$ 

 $T_{VJ} = 125^{\circ}C$ 

 $T_c = 90^{\circ}C; d = 0.5$  rectangular

(per diode)

**Diodes** 

Symbol

 $V_{RRM}$ 

 $\mathbf{I}_{\mathsf{FAV}}$ 

**P**<sub>tot</sub>

V\_

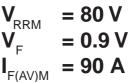
I<sub>R</sub>

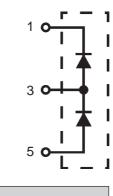
 $R_{th JC}$ 

I<sub>F(AV)M</sub>

Symbol







**Maximum Ratings** 

V

А

А

W

V

mΑ

mΑ

1.4 K/W

80

85

90

100

**Characteristic Values** 

max.

1.0

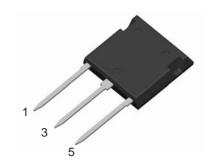
typ.

0.9

0.8

2.5

 $(T_{v,i} = 25^{\circ}C, \text{ unless otherwise specified})$ min.



#### **Features**

- Schottky diodes
- very low forward voltage
- extremely fast switching
- blocking capability optimized for elevated temperature
- ISOPLUS i4-PAC<sup>™</sup> package
- DCB isolated back surface
- enlarged creepage towards heatsink
- application friendly pinout
- low inductive current path
- high reliability
- industry standard outline

#### **Applications**

for use in

- automotive drives and converters
- hand held tools
- low voltage power supplies
- battery chargers
- solar converters
- operating
  - as free wheeling diode of choppers for supply of motors or transformers
  - as high frequency secondary rectifier
  - anti paralleled to MOSFETs complementing their intrinsic body diode

Data according to IEC 60747 and refer to a single diode unless otherwise stated. IXYS reserves the right to change limits, test conditions and dimensions.

20070605a

# LIXYS

## FSS 100-008A

Component					
Symbol	Conditions	Maximum Ratings			
T <sub>vj</sub> T <sub>stg</sub>		-55+175 -55+125	°C ℃		
V <sub>ISOL</sub>	I <sub>ISOL</sub> ≤ 1 mA; 50/60 Hz	2500	V~		
F <sub>c</sub>	mounting force with clip	20120	Ν		

Symbol	Conditions	Characteristic Values		
		min.	typ.	max.
C <sub>P</sub>	coupling capacity between shorted pins and mounting tab in the case		40	pF
d <sub>s</sub> , d <sub>A</sub> d <sub>s</sub> , d <sub>A</sub>	pin - pin pin - backside metal	5.5 5.5		mm mm
R <sub>thCH</sub>	with heatsink compound		0.15	K/W
Weight			9	g

