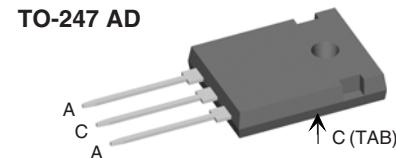
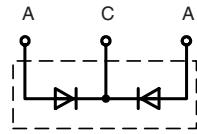


## Power Schottky Rectifier with common cathode

**I<sub>FAV</sub>** = 2x15 A  
**V<sub>RRM</sub>** = 45 V  
**V<sub>F</sub>** = 0.42 V

V <sub>RSM</sub>	V <sub>RRM</sub>	Type
V	V	
45	45	DSSK 30-0045B



A = Anode, C = Cathode , TAB = Cathode

Symbol	Conditions	Maximum Ratings		Features
I <sub>FRMS</sub>		50	A	
I <sub>FAV</sub>	T <sub>C</sub> = 135°C; rectangular, d = 0.5	15	A	• International standard package
I <sub>FAV</sub>	T <sub>C</sub> = 135°C; rectangular, d = 0.5; per device	30	A	• Very low V <sub>F</sub>
I <sub>FSM</sub>	T <sub>VJ</sub> = 45°C; t <sub>p</sub> = 10 ms (50 Hz), sine	320	A	• Extremely low switching losses
E <sub>AS</sub>	I <sub>AS</sub> = 15 A; L = 180 µH; T <sub>VJ</sub> = 25°C; non repetitive	32	mJ	• Low I <sub>RM</sub> -values
I <sub>AR</sub>	V <sub>A</sub> = 1.5 · V <sub>RRM</sub> typ.; f=10 kHz; repetitive	1.5	A	• Epoxy meets UL 94V-0
(dV/dt) <sub>cr</sub>		1000	V/µs	
T <sub>VJ</sub>		-55...+150	°C	
T <sub>VJM</sub>		150	°C	
T <sub>stg</sub>		-55...+150	°C	
P <sub>tot</sub>	T <sub>C</sub> = 25°C	90	W	
M <sub>d</sub>	mounting torque	0.8...1.2	Nm	
Weight	typical	6	g	

### NOT FOR DESIGN

Symbol	Conditions	Characteristic Values		Dimensions see Outlines.pdf
		typ.	max.	
I <sub>R</sub> ①	V <sub>R</sub> = V <sub>RRM</sub> ; T <sub>VJ</sub> = 25°C V <sub>R</sub> = V <sub>RRM</sub> ; T <sub>VJ</sub> = 100°C	10 100	mA mA	
V <sub>F</sub>	I <sub>F</sub> = 15 A; T <sub>VJ</sub> = 125°C I <sub>F</sub> = 15 A; T <sub>VJ</sub> = 25°C I <sub>F</sub> = 30 A; T <sub>VJ</sub> = 125°C	0.42 0.47 0.58	V V V	
R <sub>thJC</sub> R <sub>thCH</sub>		0.25	1.4 K/W K/W	

Pulse test: ① Pulse Width = 5 ms, Duty Cycle < 2.0%  
Data according to IEC 60747 and per diode unless otherwise specified:

**Recommended replacement:  
DSB30C45HB/DSB60C45HB**

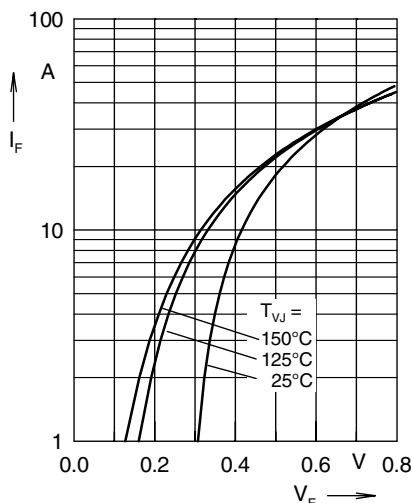


Fig. 1 Maximum forward voltage drop characteristics

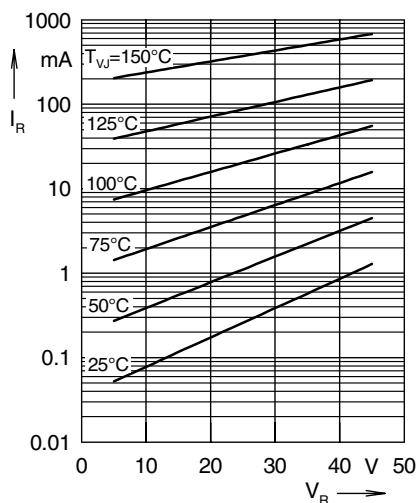


Fig. 2 Typ. value of reverse current  $I_R$  versus reverse voltage  $V_R$

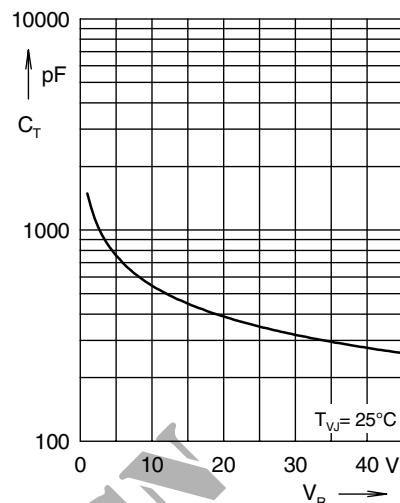


Fig. 3 Typ. junction capacitance  $C_T$  versus reverse voltage  $V_R$

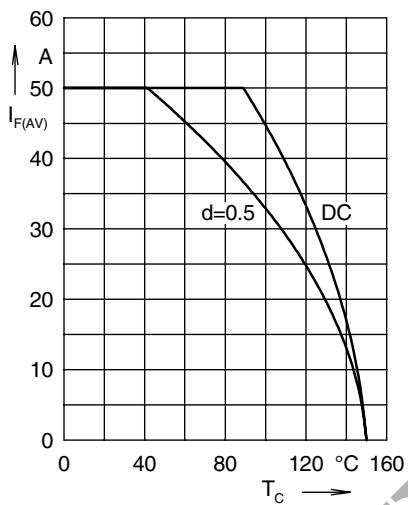


Fig. 4 Average forward current  $I_{F(AV)}$  versus case temperature  $T_C$

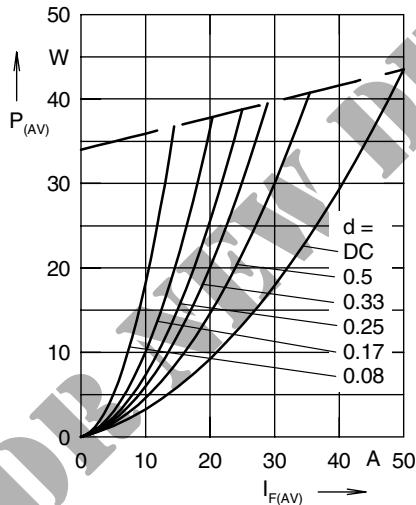


Fig. 5 Forward power loss characteristics

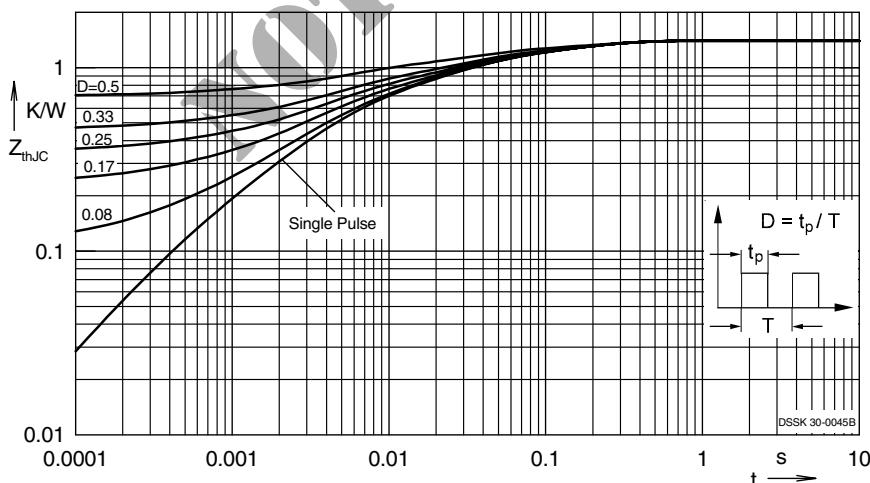


Fig. 6 Transient thermal impedance junction to case at various duty cycles

Note: All curves are per diode

IXYS reserves the right to change limits, Conditions and dimensions.

© 2006 IXYS All rights reserved