imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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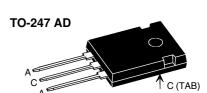




Power Schottky Rectifier with common cathode

V _{RSM}	V _{RRM}	Туре
V	V	
25	25	DSSK 80-0025B
30	30	DSSK 80-003B

-		-
I —		← _
•	- + -	
Ģ	6	Ģ
A	С	Α



= 2x40 A

= 0.39 V

 $V_{RRM} = 25 / 30 V$

A = Anode, C = Cathode , TAB = Cathode

Symbol	Conditions	Maximum Ratings	
I _{FRMS}		70	A
IFAV	$T_c = 130^{\circ}C$; rectangular, d = 0.5	40	Α
IFAV	$T_c = 130^{\circ}C$; rectangular, d = 0.5; per device	80	Α
I _{FSM}	$T_{vJ} = 45^{\circ}C; t_{p} = 10 \text{ ms} (50 \text{ Hz}), \text{ sine}$	600	A
E _{AS}	I_{AS} = 6 A; L = 180 µH; T_{VJ} = 25°C; non repetitive	10	mJ
I _{AR}	$V_A = 1.5 \bullet V_{RRM}$ typ.; f=10 kHz; repetitive	6	A
(dv/dt) _{cr}		5000	V/µs
T _{vJ}		-55+150	°C
T _{VJM}		150	°C
T _{stg}		-55+150	°C
P _{tot}	$T_c = 25^{\circ}C$	155	W
M _d	mounting torque	0.81.2	Nm
Weight	typical	6	g

Features

FAV

VF

- International standard package
- Very low V_F
- Extremely low switching losses
- Low I_{RM}-values
- Epoxy meets UL 94V-0

Applications

- Rectifiers in switch mode power supplies (SMPS)
- · Free wheeling diode in low voltage converters

Advantages

- High reliability circuit operation
- · Low voltage peaks for reduced protection circuits
- · Low noise switching
- · Low losses

Dimensions see pages D2 - 87-88

		Chara typ.	acteristic Values max.	
I _R ①	$ T_{VJ} = 25^{\circ}C V_{R} = V_{RRM} \\ T_{VJ} = 100^{\circ}C V_{R} = V_{RRM} $		40 250	mA mA
V _F	$ I_F = 40 \text{ A}; T_{VJ} = 125^{\circ}\text{C} \\ I_F = 40 \text{ A}; T_{VJ} = 25^{\circ}\text{C} \\ I_F = 80 \text{ A}; T_{VJ} = 125^{\circ}\text{C} $		0.39 0.48 0.56	V V V
R _{thJC} R _{thCH}		0.25	0.8	K/W K/W

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

IXYS reserves the right to change limits, test conditions and dimensions.



DSSK 80-0025B DSSK 80-003B

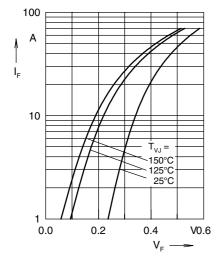


Fig. 1 Maximum forward voltage drop characteristics

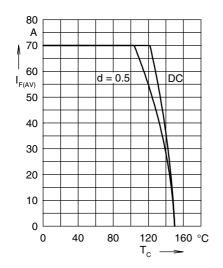


Fig. 4 Average forward current $I_{F(AV)}$ versus case temperature T_{c}

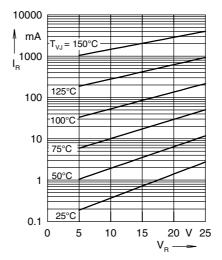


Fig. 2 Typ. value of reverse current ${\rm I_{_R}}$ versus reverse voltage ${\rm V_{_R}}$

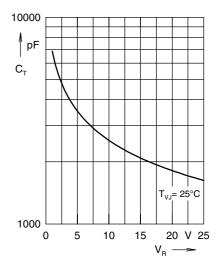


Fig. 3 Typ. junction capacitance $\rm C_{_T}$ versus reverse voltage $\rm V_{_R}$

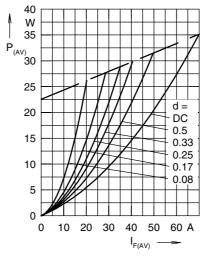


Fig. 5 Forward power loss characteristics

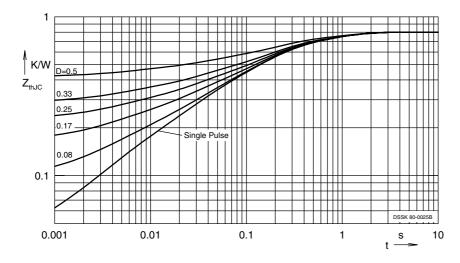


Fig. 6 Transient thermal impedance junction to case at various duty cycles

Note: All curves are per diode