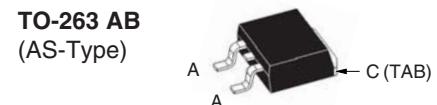
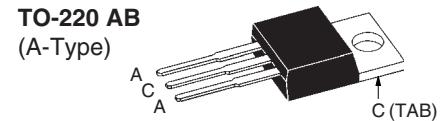
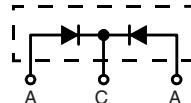


Power Schottky Rectifier with common cathode

I_{FAV} = 2x8 A
V_{RRM} = 100 V
V_F = 0.63 V

V _{RSM}	V _{RRM}	Type
V	V	
100	100	DSSK 16-01A
100	100	DSSK 16-01AS



A = Anode, C = Cathode , TAB = Cathode

Symbol	Conditions	Maximum Ratings		
I _{FRMS}		35		A
I _{FAV}	T _C = 165°C; rectangular, d = 0.5	8		A
I _{FAV}	T _C = 165°C; rectangular, d = 0.5; per device	16		A
I _{FSM}	T _{VJ} = 45°C; t _p = 10 ms (50 Hz), sine	120		A
E _{AS}	I _{AS} = 5 A; L = 100 µH; T _{VJ} = 25°C; non repetitive	1.3		mJ
I _{AR}	V _A = 1.5 • V _{RRM} typ.; f=10 kHz; repetitive	0.8		A
(dV/dt) _{cr}		5000		V/µs
T _{VJ}		-55...+175		°C
T _{VJM}		175		°C
T _{stg}		-55...+150		°C
P _{tot}	T _C = 25°C	90		W
M _d	mounting torque (Version A only)	0.4...0.6		Nm
Weight	typical	2		g

Features

- 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 Outlines.pdf

Symbol	Conditions	Characteristic Values	
		typ.	max.
I _R ①	V _R = V _{RRM} ; T _{VJ} = 25°C V _R = V _{RRM} ; T _{VJ} = 125°C	0.3 2.5	mA
V _F	I _F = 8 A; T _{VJ} = 125°C I _F = 8 A; T _{VJ} = 25°C I _F = 16 A; T _{VJ} = 125°C	0.63 0.81 0.75	V
R _{thJC}		1.7	K/W
R _{thCH} (Version A only)		0.5	K/W

Pulse test: ① 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, Conditions and dimensions.

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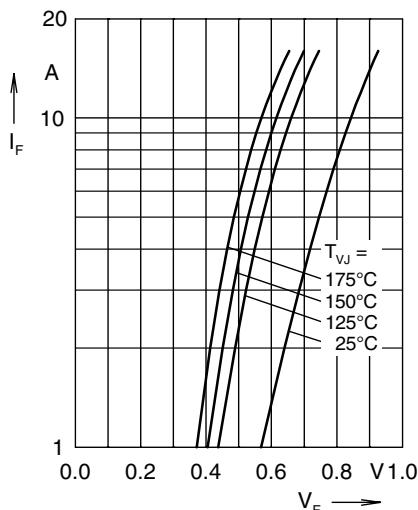


Fig. 1 Max. forward voltage drop characteristics

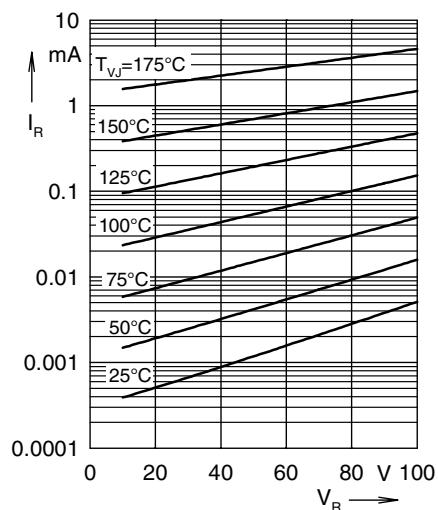


Fig. 2 Typ. reverse current I_R versus reverse voltage

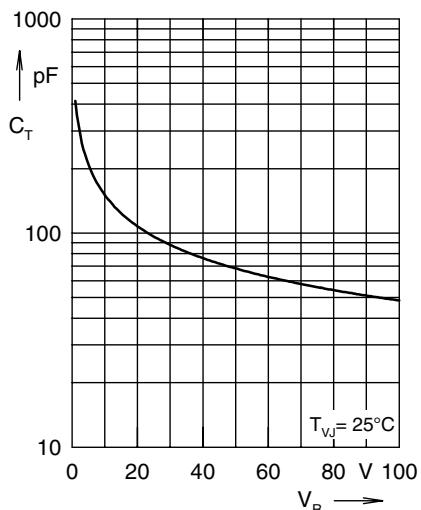


Fig. 3 Typ. junction capacitance C_T versus reverse voltage V_R

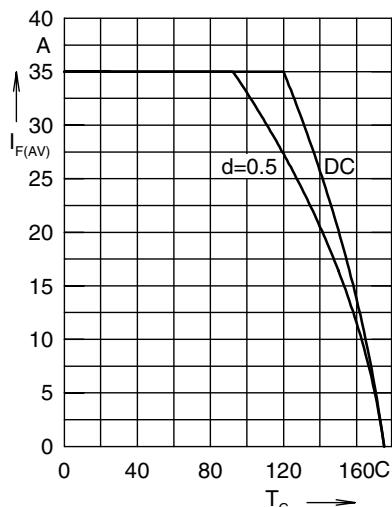


Fig. 4 Avg. forward current $I_{F(AV)}$ vs. case temperature T_C

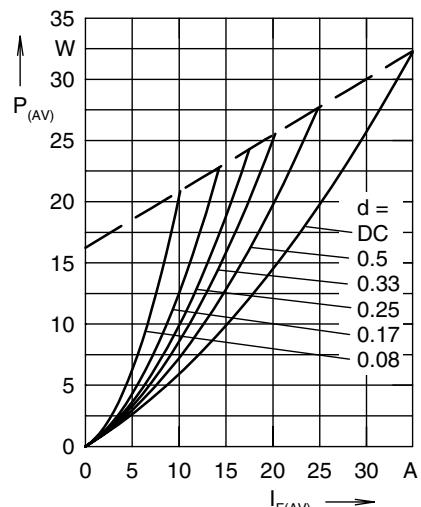


Fig. 5 Forward power loss characteristics

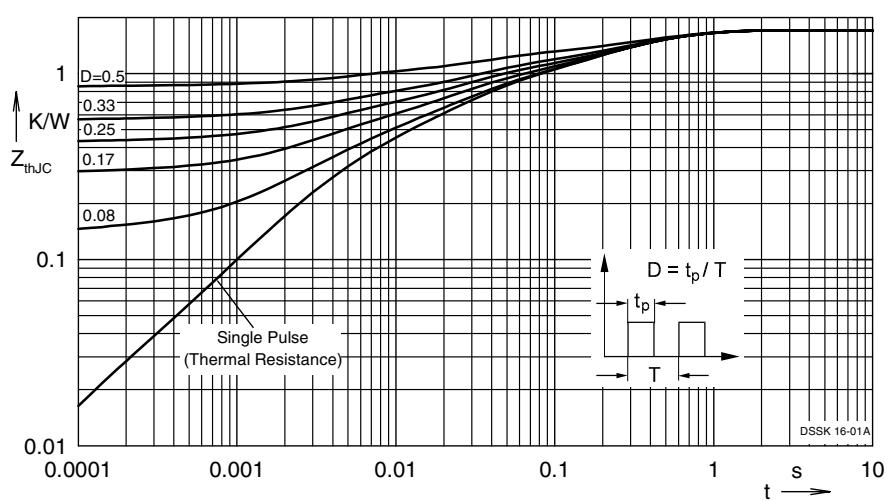


Fig. 6 Transient thermal impedance junction to case at various duty cycles

Note: All curves are per Diode

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