

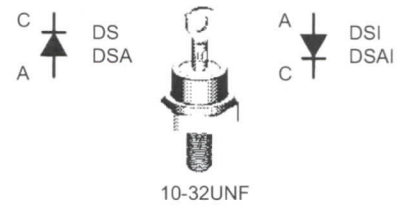
Rectifier Diode
Avalanche Diode

$V_{RRM} = 800-1800 V$
 $I_{F(RMS)} = 40 A$
 $I_{F(AV)M} = 25 A$

V_{RSM} V	$V_{(BR)min}$ ① V	V_{RRM} V	Anode on stud	Cathode on stud
900	-	800	DS 17-08A	DSI 17-08A
1300	-	1200	DS 17-12A	DSI 17-12A
1300	1300	1200	DSA 17-12A	DSAI 17-12A
1700	1750	1600	DSA 17-16A	DSAI 17-16A
1900	1950	1800	DSA 17-18A	DSAI 17-18A

① Only for Avalanche Diodes

DO-203 AA



A = Anode C = Cathode

Symbol	Test Conditions	Maximum Ratings
$I_{F(RMS)}$	$T_{VJ} = T_{VJM}$	40 A
$I_{F(AV)M}$	$T_{case} = 125^{\circ}C$; 180° sine	25 A
P_{RSM}	DSA(I) types, $T_{VJ} = T_{VJM}$, $t_p = 10 \mu s$	7 kW
I_{FSM}	$T_{VJ} = 45^{\circ}C$; $t = 10 ms$ (50 Hz), sine	370 A
	$V_R = 0$; $t = 8.3 ms$ (60 Hz), sine	400 A
I^2t	$T_{VJ} = T_{VJM}$; $t = 10 ms$ (50 Hz), sine	300 A
	$V_R = 0$; $t = 8.3 ms$ (60 Hz), sine	320 A
I^2t	$T_{VJ} = 45^{\circ}C$; $t = 10 ms$ (50 Hz), sine	680 A ² s
	$V_R = 0$; $t = 8.3 ms$ (60 Hz), sine	660 A ² s
T_{VJ}	$T_{VJ} = T_{VJM}$; $t = 10 ms$ (50 Hz), sine	450 A ² s
	$V_R = 0$; $t = 8.3 ms$ (60 Hz), sine	430 A ² s
T_{VJM}		-40...+180 °C
T_{stg}		180 °C
M_d	Mounting torque	-40...+180 °C
Weight		2.2-2.8 Nm
		19-25 lb.in.
		6 g

Features

- International standard package, JEDEC DO-203 AA (DO-4)
- Planar glassivated chips

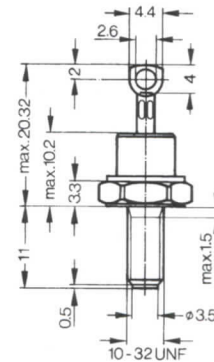
Applications

- Supplies for DC power equipment
- DC supply for PWM inverter
- Field supply for DC motors
- Battery DC power supplies

Advantages

- Space and weight savings
- Simple mounting
- Improved temperature and power cycling
- Reduced protection circuits

Dimensions in mm (1 mm = 0.0394")



Symbol	Test Conditions	Characteristic Values
I_R	$T_{VJ} = T_{VJM}$; $V_R = V_{RRM}$	≤ 4 mA
V_F	$I_F = 55 A$; $T_{VJ} = 25^{\circ}C$	≤ 1.36 V
V_{T0}	For power-loss calculations only	0.85 V
r_T	$T_{VJ} = T_{VJM}$	8 mΩ
R_{thJC}	DC current	1.5 K/W
R_{thJH}	DC current	2.1 K/W
d_S	Creepage distance on surface	2.05 mm
d_A	Strike distance through air	2.05 mm
a	Max. allowable acceleration	100 m/s ²

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