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DSA9 Series

Avalanche Diode

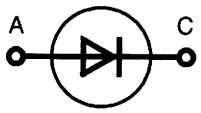
V_{RRM} = 1200 - 1800V
$I_{F(RMS)}$ = 18 A
$I_{F(AV)M}$ = 11 A

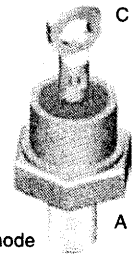
V_{RSM} V	$V_{(BR)min}$ V	V_{RRM} V	Type
1300	1300	1200	DSA 9-12F
1700	1750	1600	DSA 9-16F
1900	1950	1800	DSA 9-18F

Features:
Internation standard package JEDEC DO4
Planar passivated 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

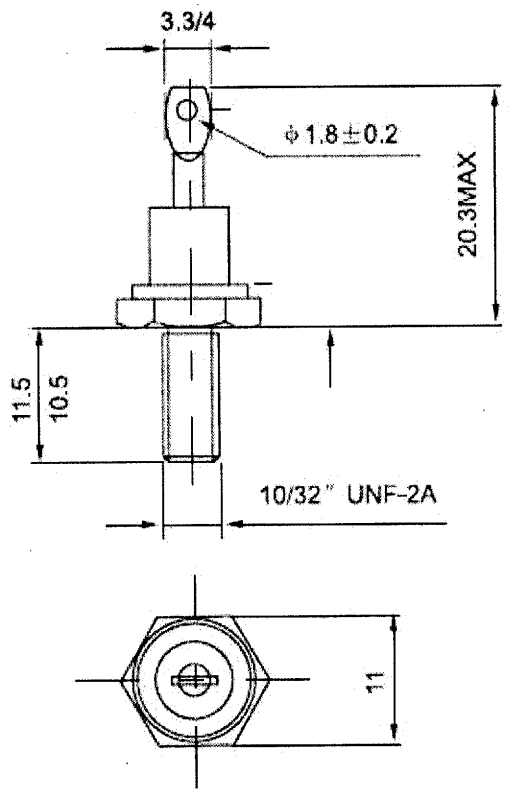




A = Anode, C = Cathode

Symbol	Conditions			Maximum Ratings	
I_{FRMS}	$T_{VJ} = T_{VJM}$			18	A
I_{FAVM}	T_C = 150°C; 180° sine			11	A
P_{RSM}	T_{VJM}, t_p = 10 ms			4.5	kW
I_{FSM}	T_{VJ} = 45°C;	t = 10 ms	(50 Hz), sine	250	A
		t = 8.3 ms	(60 Hz), sine	265	
	T_{VJ} = 150°C;	t = 10 ms	(50 Hz), sine	200	A
		t = 8.3 ms	(60 Hz), sine	220	
I^2t	T_{VJ} = 45°C;	t = 10 ms	(50 Hz), sine	310	A^2s
		t = 8.3 ms	(60 Hz), sine	295	
	T_{VJ} = 150°C;	t = 10 ms	(50 Hz), sine	200	A^2s
		t = 8.3 ms	(60 Hz), sine	190	
T_{VJ}				-40...+180	°C
T_{VJM}				180	°C
T_{stg}				-40...+180	°C
M_d	mounting torque			2.2...2.8	Nm
Weight	typical			5	g

Symbol	Conditions	Characteristic Values		
		typ.	max.	
I_R	$V_R = V_{RRM}$ $T_{VJ} = T_{VJM}$		3	mA
V_F	$I_F = 36$ A $T_{VJ} = 25°C$		1.4	V
V_{T0}	For power-loss calculations only		0.85	V
r_T	$T_{VJ} = T_{VJM}$		15	mΩ
R_{thJC}	DC current		2	K/W
	180° sine		2.17	K/W
R_{thJH}	DC current		3.0	K/W
d_S	Creepage distance on surface		2.0	mm
d_A	Strike distance through air		2.0	mm
a	Max. allowable acceleration		100	m/s^2



For metric devices:M5×0.8

DO-4