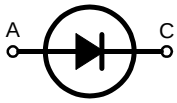
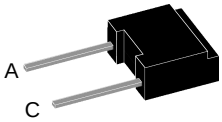
Rectifier Diode
Avalanche Diode

V_{RRM} = 1200-1800 V
$I_{F(RMS)}$ = 7 A
$I_{F(AV)M}$ = 2.3 A

V_{RSM} V	$V_{(BR)min}$ ① V	V_{RRM} V	Standard Type	Avalanche Types
1300	1300	1200	DS 1-12D	DSA 1-12D
1700	1750	1600		DSA 1-16D
1900	1950	1800		DSA 1-18D

① Only for Avalanche Diodes





A = Anode C = Cathode

Symbol	Test Conditions		Maximum Ratings	
I_{FRMS}	T_{VJ} = T_{VJM}		7	A
$I_{F(AV)M}$	T_{amb} = 45°C; R_{thJA} = 38 K/W; 180° sine		2.3	A
	T_{amb} = 45°C; R_{thJA} = 80 K/W; 180° sine		1.3	A
P_{RSM}	DSA types, T_{VJ} = T_{VJM}, t_p = 10 µs		1.6	kW
I_{FSM}	T_{VJ} = 45°C;	t = 10 ms (50 Hz), sine	110	A
	V_R = 0	t = 8.3 ms (60 Hz), sine	118	A
	T_{VJ} = T_{VJM}	t = 10 ms (50 Hz), sine	100	A
	V_R = 0	t = 8.3 ms (60 Hz), sine	104	A
I^2t	T_{VJ} = 45°C	t = 10 ms (50 Hz), sine	60	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	58	A^2s
	T_{VJ} = T_{VJM}	t = 10 ms (50 Hz), sine	50	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	45	A^2s
T_{VJ}			-40...+150	°C
T_{VJM}			150	°C
T_{stg}			-40...+150	°C
Weight			0.8	g

Symbol	Test Conditions	Characteristic Values		
I_R	T_{VJ} = T_{VJM}; V_R = V_{RRM}	≤	0.7	mA
V_F	I_F = 7 A; T_{VJ} = 25°C	≤	1.3	V
V_{T0}	For power-loss calculations only		0.8	V
r_T	T_{VJ} = T_{VJM}		67	mΩ
R_{thJA}	Forced air cooling with 1.5 m/s, T_{amb} = 45°C		38	K/W
	Soldered on to PC board, T_{amb}= 45°C		80	K/W
d_S	Creepage distance on surface		8.5	mm
d_A	Strike distance through air		6.7	mm
a	Max. allowable acceleration		100	m/s^2

Data according to IEC 60747
IXYS reserves the right to change limits, test conditions and dimensions

Features
- Plastic standard package
- Planar glassivated chips

Applications
- Low power rectifiers
- Field supply for DC motors
- Power supplies
- High voltage rectifiers

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

Dimensions in mm (1 mm = 0.0394")