

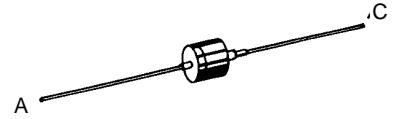
Rectifier Diode

Avalanche Diode

V_{RRM} = 800-1800 V
I_{F(RMS)} = 7 A
I_{F(AV)M} = 3.6 A

V _{RSM} V	V _{(BR)min} ①	V _{RRM} V	Standard Types	Avalanche Types
900		800	DS 2-08A	
1300	1300	1200	DS 2-12A	DSA 2-12A
1700	1750	1600		DSA 2-16A
1900	1950	1800		DSA 2-18A

① Only for Avalanche Diodes

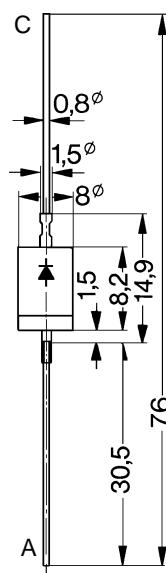


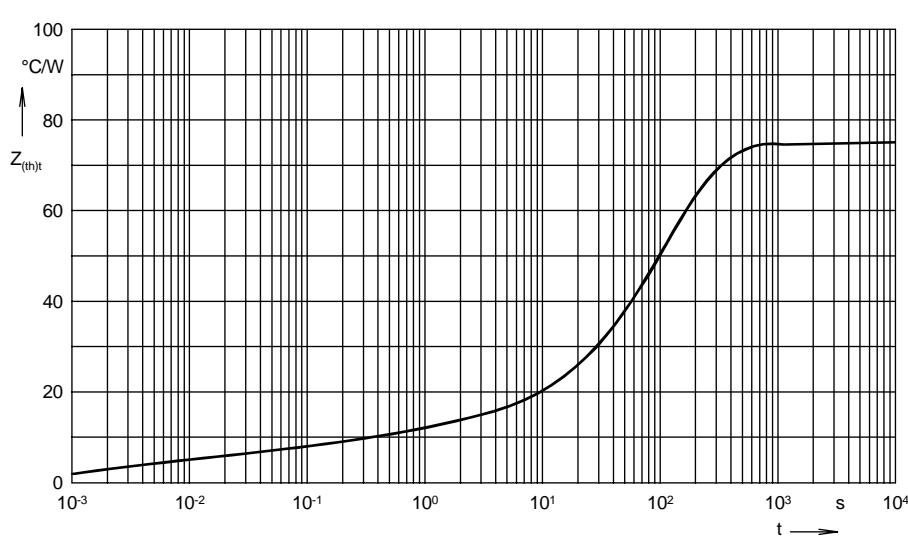
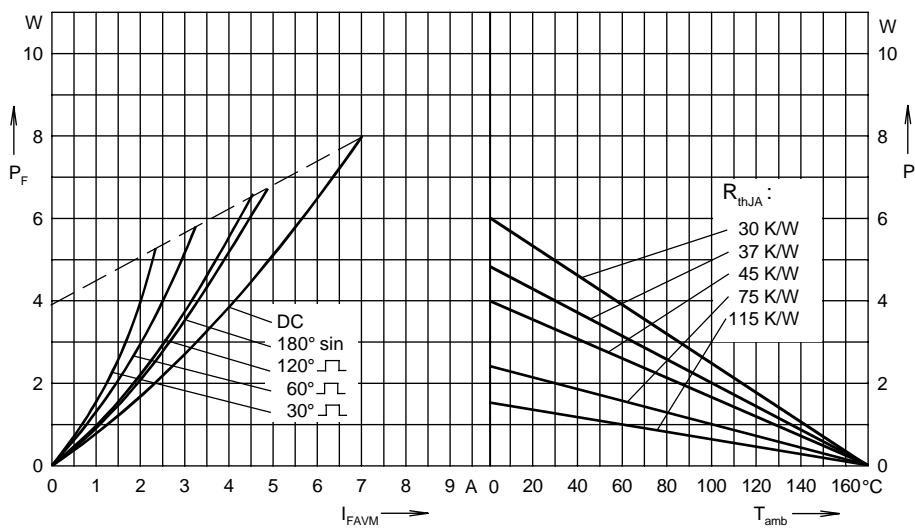
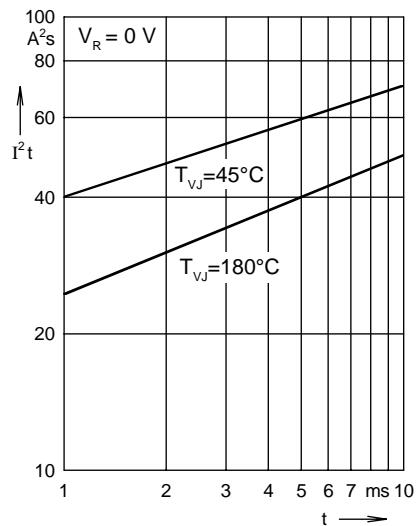
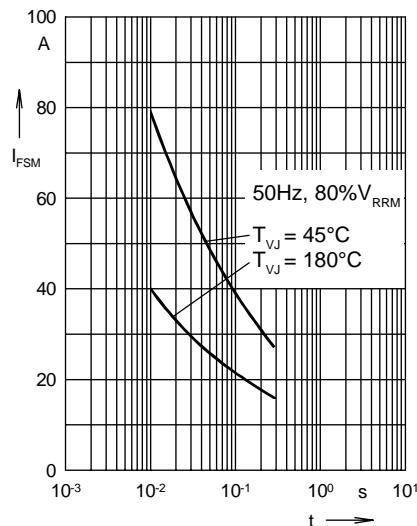
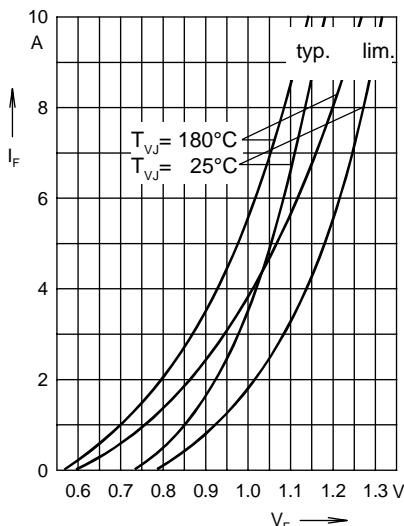
A = Anode C = Cathode

Symbol	Test Conditions	Maximum Ratings		Features
I _{F(RMS)}	T _{VJ} = T _{VJM}	7	A	• International standard package
I _{F(AV)M}	T _{amb} = 45°C; R _{thJA} = 30 K/W; 180° sine	3.6	A	• Axial wire connexions
	T _{amb} = 45°C; R _{thJA} = 115 K/W; 180° sine	1.2	A	• Planar glassivated chips
P _{RSM}	DSA types, T _{VJ} = 25°C, t _p = 10 µs	2.5	kW	
I _{FSM}	T _{VJ} = 45°C; t = 10 ms (50 Hz), sine	120	A	
	V _R = 0 t = 8.3 ms (60 Hz), sine	127	A	
	T _{VJ} = T _{VJM} t = 10 ms (50 Hz), sine	100	A	
	V _R = 0 t = 8.3 ms (60 Hz), sine	106	A	
I ² t	T _{VJ} = 45°C t = 10 ms (50 Hz), sine	72	A ² s	
	V _R = 0 t = 8.3 ms (60 Hz), sine	68	A ² s	
	T _{VJ} = T _{VJM} t = 10 ms (50 Hz), sine	50	A ² s	
	V _R = 0 t = 8.3 ms (60 Hz), sine	47	A ² s	
T _{VJM}		180	°C	
T _{VJ}		-40...+180	°C	
T _{stg}		-40...+180	°C	
Weight		2.4	g	

Symbol	Test Conditions	Characteristic Values	
I _R	T _{VJ} = 180°C; V _R = V _{RRM}	≤ 2	mA
V _F	I _F = 7 A; T _{VJ} = 25°C	≤ 1.25	V
V _{T0}	For power-loss calculations only	0.85	V
r _T	T _{VJ} = T _{VJM}	43	mΩ
R _{thJA}	Forced air cooling with 1.5 m/s, T _{amb} = 45°C	30	K/W
	Soldered between 2 cooling fins, T _{amb} = 45°C	37	K/W
	Soldered onto PC board (25 mm), T _{amb} = 45°C	75	K/W
	Free air cooling, T _{amb} = 45°C	115	K/W
d _s	Creepage distance on surface	2.25	mm
d _a	Strike distance through air	2.25	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





R_{thJA} for various conduction angles d:

d	R_{thJA} (K/W)
DC	75
180°	75.7
120°	76.1
60°	76.7
30°	77.4

Constants for Z_{thJA} calculation:

i	R_{thi} (K/W)	t_i (s)
1	0.15	0.001
2	10.85	0.1
3	64	35