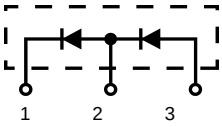
Phase-leg Rectifier Diode

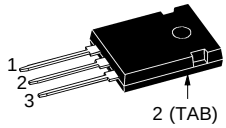
V_{RRM} = 1200/1600 V
$I_{F(RMS)}$ = 2x 70 A
$I_{F(AV)M}$ = 2x 45 A

Preliminary data

V_{RSM} V	V_{RRM} V	Type
1300	1200	DSP 45-12A
1700	1600	DSP 45-16A



TO-247 AD



1 = Cathode, 2 = Anode/Cathode, 3 = Anode

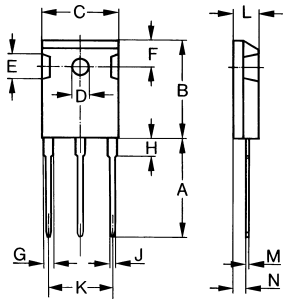
Symbol	Test Conditions			Maximum Ratings	
$I_{F(RMS)}$				70	A
$I_{F(AV)M}$	T_C = 130°C; 180° sine			45	A
I_{FSM}	T_{VJ} = 45°C;	t = 10 ms	(50 Hz), sine	480	A
		t = 8.3 ms	(60 Hz), sine	510	A
	T_{VJ} = 150°C;	t = 10 ms	(50 Hz), sine	420	A
		t = 8.3 ms	(60 Hz), sine	450	A
I^2t	T_{VJ} = 45°C	t = 10 ms	(50 Hz), sine	1150	A^2s
		t = 8.3 ms	(60 Hz), sine	1090	A^2s
	T_{VJ} = 150°C;	t = 10 ms	(50 Hz), sine	880	A^2s
		t = 8.3 ms	(60 Hz), sine	850	A^2s
T_{VJ}				-40...+180	°C
T_{VJM}				180	°C
T_{stg}				-40...+150	°C
M_d	mounting torque M3			0.8...1.2	Nm
Weight				6	g

Symbol	Test Conditions		Characteristic Values	
I_R	T_{VJ} = 150°C V_R = V_{RRM}	≤	3	mA
V_F	I_F = 40 A; T_{VJ} = 25°C	≤	1.23	V
V_{T0}	For power-loss calculations only		0.8	V
r_T			11	mΩ
R_{thJC}	DC current		0.55	K/W
R_{thCH}	With heatsink compound	typ.	0.2	K/W
a	Maximum allowable acceleration		50	m/s^2

Features

- International standard package JEDEC TO-247 AD
- For single and three phase bridge configuration
- Planar passivated chips
- Epoxy meets UL 94V-0 flammability classification

Dimensions in mm (1 mm = 0.0394")



Dim.	Millimeter Min.	Max.	Inches Min.	Max.
A	19.81	20.32	0.780	0.800
B	20.80	21.46	0.819	0.845
C	15.75	16.26	0.610	0.640
D	3.55	3.65	0.140	0.144
E	4.32	5.49	0.170	0.216
F	5.4	6.2	0.212	0.244
G	1.65	2.13	0.065	0.084
H	-	4.5	-	0.177
J	1.0	1.4	0.040	0.055
K	10.8	11.0	0.426	0.433
L	4.7	5.3	0.185	0.209
M	0.4	0.8	0.016	0.031
N	1.5	2.49	0.087	0.102

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

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