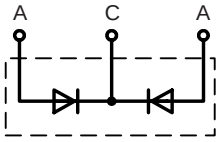
Rectifier Diode

with common cathode

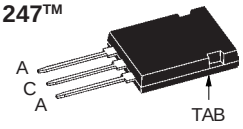
V_{RRM} = 1600 V
$I_{F(AV)M}$ = 45 A

Preliminary data sheet

V_{RSM} V	V_{RRM} V	Type
1700	1600	DSIK 45-16AR



ISOPLUS 247™



A = Anode, C = Cathode

Symbol	Conditions		Maximum Ratings	
$I_{F(AV)M}$	T_C = 100°C; 180° sine		45	A
I_{FSM}	T_{VJ} = 45°C;	t = 10 ms (50 Hz), sine	475	A
	V_R = 0 V;	t = 8.3 ms (60 Hz), sine	510	A
	T_{VJ} = 150°C;	t = 10 ms (50 Hz), sine	410	A
	V_R = 0 V;	t = 8.3 ms (60 Hz), sine	440	A
I^2t	T_{VJ} = 45°C;	t = 10 ms (50 Hz), sine	1130	A^2s
	V_R = 0 V;	t = 8.3 ms (60 Hz), sine	1090	A^2s
	T_{VJ} = 150°C;	t = 10 ms (50 Hz), sine	840	A^2s
	V_R = 0 V;	t = 8.3 ms (60 Hz), sine	810	A^2s
T_{VJ}			-40...+150	°C
T_{VJM}			150	°C
T_{stg}			-40...+150	°C
F_C	mounting force with clips		20...120	N
V_{ISOL}	50/60 Hz, RMS, t = 1 minute, leads-to-tab		2500	V~
Weight	typical		6	g

Symbol	Conditions	Characteristic Values		
I_R	T_{VJ} = T_{VJM}; V_R = V_{RRM}	≤	3	mA
V_F	I_F = 40 A; T_{VJ} = 25°C	≤	1.22	V
V_{T0}	For power-loss calculations only		0.8	V
r_T	T_{VJ} = T_{VJM}		8	mΩ
R_{thJC}	DC current		0.65	K/W
R_{thCH}	typical		0.2	K/W

Features

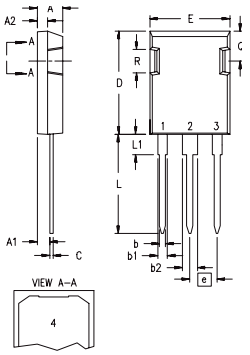
- International standard package
- Planar glassivated chips
- Isolated and UL registered E153432
- Epoxy meets UL 94V-0

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



Dim.	Millimeter Min.	Max.	Inches Min.	Max.
A	4.83	5.21	.190	.205
A_1	2.29	2.54	.090	.100
A_2	1.91	2.16	.075	.085
b	1.14	1.40	.045	.055
b_1	1.91	2.13	.075	.084
b_2	2.92	3.12	.115	.123
C	0.61	0.80	.024	.031
D	20.80	21.34	.819	.840
E	15.75	16.13	.620	.635
e	5.45 BSC		.215 BSC	
L	19.81	20.32	.780	.800
L1	3.81	4.32	.150	.170
Q	5.59	6.20	.220	.244
R	4.32	4.83	.170	.190

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

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