

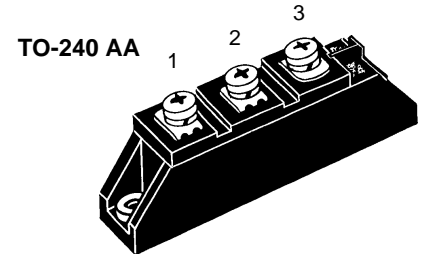
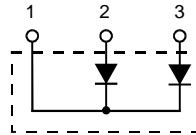
# Fast Recovery Epitaxial Diode (FRED) Module

## MEK 150-04 DA

$V_{RRM} = 400 \text{ V}$   
 $I_{FAV} = 150 \text{ A}$   
 $t_{rr} = 300 \text{ ns}$

Preliminary data

$V_{RSM}$	$V_{RRM}$	Type
V	V	
400	400	MEK 150-04DA



Symbol	Conditions	Maximum Ratings	
$I_{FRMS}$	$T_C = 100^\circ\text{C}$ ; rectangular, $d = 0.5$	200	A
$I_{FAVM}$		150	A
$I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ ; $t = 10 \text{ ms}$ (50 Hz), sine	1200	A
$T_{VJ}$		-40...+150	$^\circ\text{C}$
$T_{VJM}$		175	$^\circ\text{C}$
$T_{stg}$		-40...+150	$^\circ\text{C}$
$P_{tot}$	$T_C = 25^\circ\text{C}$	360	W
$V_{ISOL}$	50/60 Hz, RMS; $I_{ISOL} \leq 1 \text{ mA}$	3600	V~
$M_d$	Mounting torque with screw M5	2.5-4/22-35	Nm/lb.in.
	Terminal connection torque	2.5-4/22-35	Nm/lb.in.
Weight	typical	90	g

### Features

- International standard package with DCB ceramic base plate
- Planar passivated chips
- Short recovery time
- Low switching losses
- Soft recovery behaviour
- Isolation voltage 3600 V~
- UL registered E 72873

### Applications

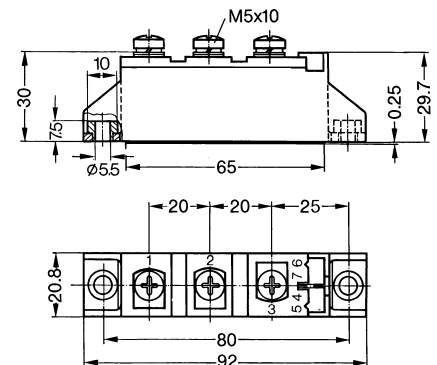
- Antiparallel diode for high frequency switching devices
- Free wheeling diode in converters and motor control circuits
- Inductive heating and melting
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners and welders

### Advantages

- High reliability circuit operation
- Low voltage peaks for reduced protection circuits
- Low noise switching
- Low losses

Symbol	Conditions	Characteristic Values	
		typ.	max.
$I_R$	$T_{VJ} = 25^\circ\text{C}$ $V_R = V_{RRM}$ $T_{VJ} = 150^\circ\text{C}$ $V_R = V_{RRM}$	2.0	mA
		8.5	mA
$V_F$	$I_F = 300 \text{ A}$ ; $T_{VJ} = 150^\circ\text{C}$ $T_{VJ} = 25^\circ\text{C}$	1.4	V
		1.6	V
$R_{thJC}$	0.08	0.35	K/W
$R_{thCH}$		K/W	
$I_{RM}$	$V_R = 100 \text{ V}$ ; $I_F = 200 \text{ A}$ ; $-di_F/dt = 100 \text{ A}/\mu\text{s}$ $T_{VJ} = 100^\circ\text{C}$	11	14 A

### Dimensions in mm (1 mm = 0.0394")



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Discrete Semiconductor Modules](#) category:*

*Click to view products by [IXYS](#) manufacturer:*

Other Similar products are found below :

[M252511FV](#) [DD260N12K-A](#) [DD380N16A](#) [DD89N1600K-A](#) [APT2X21DC60J](#) [APT58M80J](#) [B522F-2-YEC](#) [MSTC90-16](#) [25.163.0653.1](#)  
[25.163.2453.0](#) [25.163.4253.0](#) [25.190.2053.0](#) [25.194.3453.0](#) [25.320.4853.1](#) [25.320.5253.1](#) [25.326.3253.1](#) [25.326.3553.1](#) [25.330.1653.1](#)  
[25.330.4753.1](#) [25.330.5253.1](#) [25.334.3253.1](#) [25.334.3353.1](#) [25.350.2053.0](#) [25.352.4753.1](#) [25.522.3253.0](#) [T483C](#) [T484C](#) [T485F](#) [T485H](#)  
[T512F-YEB](#) [T513F](#) [T514F](#) [T554](#) [T612FSE](#) [25.161.3453.0](#) [25.179.2253.0](#) [25.194.3253.0](#) [25.325.1253.1](#) [25.326.4253.1](#) [25.330.0953.1](#)  
[25.332.4353.1](#) [25.350.1653.0](#) [25.350.2453.0](#) [25.352.1453.0](#) [25.352.1653.0](#) [25.352.2453.0](#) [25.352.5453.1](#) [25.522.3353.0](#) [25.602.4053.0](#)  
[25.640.5053.0](#)