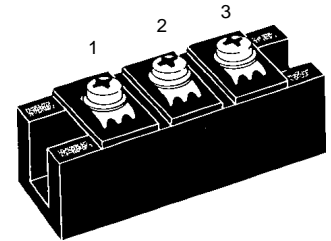
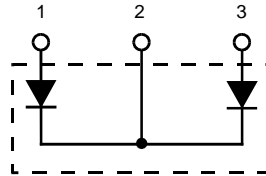


# HiPerFRED™ Epitaxial Diode

dual diode, common cathode

**MEK 600-04 DA**
 $V_{RRM} = 400 \text{ V}$   
 $I_{FAVM} = 880 \text{ A}$   
 $t_{rr} = 220 \text{ ns}$ 

$V_{RSM}$ V	$V_{RRM}$ V	Type
400	400	MEK 600-04DA



Symbol	Conditions	Maximum Ratings	
$I_{FAVM}$	$T_C = 25^\circ\text{C}$ ; rectangular, $d = 0.5$	880	A
$I_{FAVM}$	$T_C = 80^\circ\text{C}$ ; rectangular, $d = 0.5$	575	A
$I_{FSM}$	$T_{VJ} = 25^\circ\text{C}$ ; $t = 10 \text{ ms}$ (50 Hz), sine	tbd	A
$T_{VJ}$		-40...+150	$^\circ\text{C}$
$T_{stg}$		-40...+125	$^\circ\text{C}$
$P_{tot}$	$T_C = 25^\circ\text{C}$	1100	W
$V_{ISOL}$	50/60 Hz, RMS; $I_{ISOL} \leq 1 \text{ mA}$	3600	V~
$M_d$	Mounting torque with screw M5 Terminal connection torque	2.25-2.75/20-25 4.5-5.5/40-48	Nm/lb.in. Nm/lb.in.
$a$	Allowable acceleration	50	$\text{m/s}^2$

Symbol	Conditions	Characteristic Values		
		min.	typ.	max.
$I_R$	$T_{VJ} = 25^\circ\text{C}$ $V_R = V_{RRM}$ $T_{VJ} = 125^\circ\text{C}$ $V_R = V_{RRM}$		6	mA mA
$V_F$	$I_F = 400 \text{ A}$ ; $T_{VJ} = 125^\circ\text{C}$ $T_{VJ} = 25^\circ\text{C}$			1.1 V 1.4 V
$t_{rr}$	$V_R = 100 \text{ V}$ ; $-di_F/dt = 900 \text{ A}/\mu\text{s}$		220	ns
$I_{RM}$	$I_F = 400 \text{ A}$ ; $T_{VJ} = 125^\circ\text{C}$		80	A
$R_{thJS}$				0.11 K/W
$R_{thJC}$				0.22 K/W
$d_s$	Creeping distance on surface	12.7		mm
$d_A$	Strike distance through air	9.6		mm
<b>Weight</b>			150	g

Data according to IEC 60747

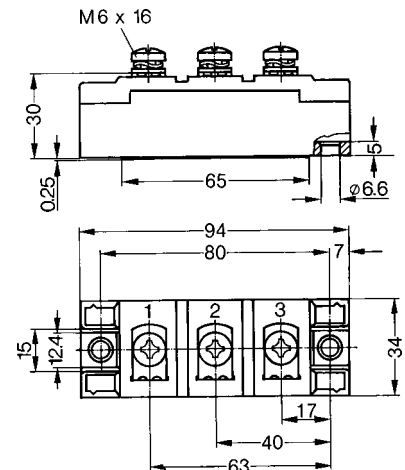
## Features

- HiPerFRED™ diode chips
  - fast reverse recovery
  - low operating forward voltage
  - low leakage current
  - avalanche capability
- Industry Standard package
  - with isolated DCB ceramic base plate
  - UL registered E72873

## Applications

- Topologies
  - dual diode with common cathode
  - high current single diode with pins 1 and 3 paralleled
- Circuits
  - free wheeling diode of choppers, H-bridges, phaselegs etc.
  - secondary rectifier for switched mode power supplies, welders etc.

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



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