

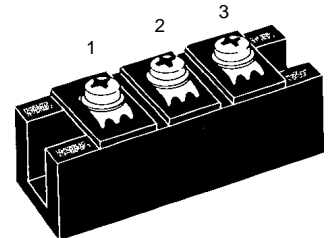
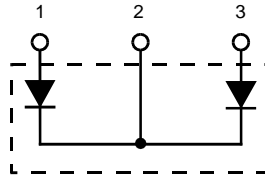
HiPerFRED™

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_{RRM}	Type
V	V	
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	2.25-2.75/20-25	Nm/lb.in.
	Terminal connection torque	4.5-5.5/40-48	Nm/lb.in.
a	Allowable acceleration	50	m/s^2

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

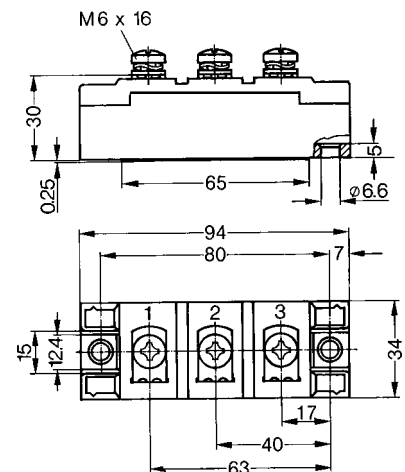
Applications

- 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.

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	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
Weight			150	g

Data according to IEC 60747

Dimensions in mm (1 mm = 0.0394")



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