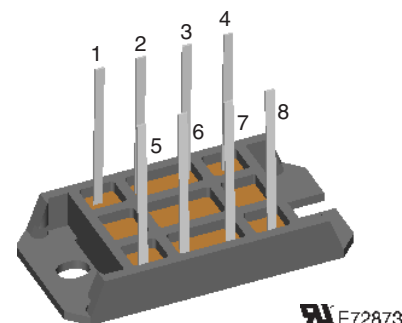
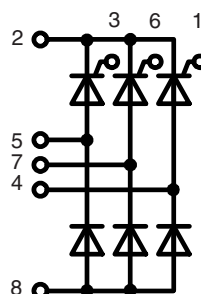


Three Phase Half Controlled Rectifier Bridge

$$I_{dAVM} = 43 \text{ A}$$

$$V_{RRM} = 1200-1600 \text{ V}$$

V_{RSM} V_{DSM} V	V_{RRM} V_{DRM} V	Type
1300	1200	VVZ 40-12io1
1500	1400	VVZ 40-14io1
1700	1600	VVZ 40-16io1



Symbol	Conditions	Maximum Ratings
I_{dAV}	$T_K = 100^\circ\text{C}$; module	34 A
I_{dAVM}	module	43 A
I_{FRMS}, I_{TRMS}	per leg	25 A
I_{FSM}, I_{TSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine 320 A $t = 8.3 \text{ ms}$ (60 Hz), sine 340 A
	$T_{VJ} = T_{VJM}$; $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine 290 A $t = 8.3 \text{ ms}$ (60 Hz), sine 310 A
I^2t	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine 510 A ² s $t = 8.3 \text{ ms}$ (60 Hz), sine 485 A ² s
	$T_{VJ} = T_{VJM}$; $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine 420 A ² s $t = 8.3 \text{ ms}$ (60 Hz), sine 400 A ² s
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}$; $f = 400 \text{ Hz}$; $t_p = 200 \mu\text{s}$; $V_D = 2/3 V_{DRM}$; $I_G = 0.3 \text{ A}$; $di_G/dt = 0.3 \text{ A}/\mu\text{s}$	repetitive, $I_T = 50 \text{ A}$ 150 A/ μs non repetitive, $I_T = 1/3 \cdot I_{dAV}$ 500 A/ μs
$(dv/dt)_{cr}$	$T_{VJ} = T_{VJM}$; $V_{DR} = 2/3 V_{DRM}$; $R_{GK} = \infty$; method 1 (linear voltage rise)	1000 V/ μs
V_{RGM}		10 V
P_{GM}	$T_{VJ} = T_{VJM}$; $I_T = I_{TAVM}$	$t_p = 30 \mu\text{s}$ $\leq 10 \text{ W}$ $t_p = 500 \mu\text{s}$ $\leq 5 \text{ W}$ $t_p = 10 \text{ ms}$ $\leq 1 \text{ W}$
P_{GAVM}		0.5 W
T_{VJ}		-40...+125 $^\circ\text{C}$
T_{VJM}		125 $^\circ\text{C}$
T_{stg}		-40...+125 $^\circ\text{C}$
V_{ISOL}	50/60 Hz, RMS; $I_{ISOL} \leq 1 \text{ mA}$	$t = 1 \text{ min}$ 3000 V~ $t = 1 \text{ s}$ 3600 V~
M_d	Mounting torque	(M5) 2-2.5 Nm (10-32 UNF) 18-22 lb.in.
Weight	typ.	28 g

Features

- Package with DCB ceramic base plate
- Isolation voltage 3600 V~
- Planar passivated chips
- Soldering terminals
- UL registered E 72873

Applications

- Input rectifier for switch mode power supplies (SMPS)
- Softstart capacitor charging
- Electric drives and auxiliaries

Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling

Data according to IEC 60747 and refer to a single thyristor/diode unless otherwise stated.

