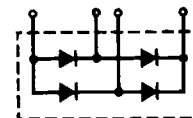
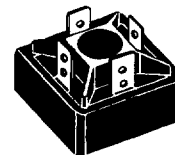


# Rectifier Bridges, 1~



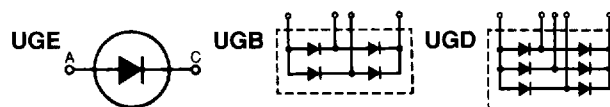
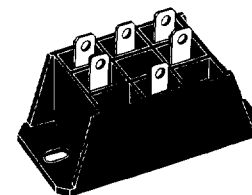
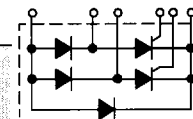
## Rectifier Bridges, 1~ with DCB-Ceramic Base

Type	$V_{RRM}$	$V_{VRMS}$	$I_{dAV} @ T_C$		$I_{FSM} 45^\circ C$ 10 ms	$V_{TO}$	$r_F$	$T_{VJM}$	$R_{thJC}$ per chip	$R_{thCK}$ per chip	Package style
UL E 72 873 (M)	V	V	A	°C	A	V	mΩ	°C	K/W	K/W	See outlines on page 32
<b>New</b>											
VBO 13-16NO2	1600	500	18	85	220	0.85	17	150	5.6	0.4	Fig. 37 Weight = 15 g
● VBO 13-14NO2	1400	440									
VBO 13-12NO2	1200	400									
VBO 13-08NO2	800	250									
VBO 13-16AO2	1600	500	18	85	220	0.85	17	150	5.6	0.4	
● VBO 13-14AO2	1400	440									
VBO 13-12AO2	1200	400									
VBO 20-16NO2	1600	500	31	85	300	0.85	14	150	3.0	0.4	
● VBO 20-14NO2	1400	440									
VBO 20-12NO2	1200	400									
VBO 20-08NO2	800	250									
VBO 20-16AO2	1600	500	31	85	300	0.85	14	150	3.0	0.4	
● VBO 20-14AO2	1400	440									
VBO 20-12AO2	1200	400									
VBO 25-16NO2	1600	500	38	85	370	0.85	8	150	2.8	0.4	
● VBO 25-14NO2	1400	440									
VBO 25-12NO2	1200	400									
VBO 25-08NO2	800	250									
VBO 25-16AO2	1600	500	38	85	370	0.85	8	150	2.8	0.4	
● VBO 25-14AO2	1400	440									
VBO 25-12AO2	1200	400									



## Half Controlled Rectifier Bridges, 1~ with freewheeling diode

Type	$V_{RRM}$	$V_{VRMS}$	$I_{dAV} @ T_K$		$I_{FSM} 45^\circ C$ 10 ms	$V_{TO}$	$r_F$	$T_{VJM}$	$R_{thJC}$ per chip	$R_{thCK}$ per chip	Package style
UL E 72 873 (M)	V	V	A	°C	A	V	mΩ	°C	K/W	K/W	See outlines on page 32
<b>New</b>											
VHF 15-16io5	1600	500	15	85	190	1.0	40	125	2.4	0.6	Fig. 38 Weight = 50 g
● VHF 15-14io5	1400	440									
VHF 15-12io5	1200	400									
VHF 15-08io5	800	250									
● VHF 15-06io5	600	180									
VHF 28-16io5	1600	500	28	85	250	0.9	15	125	1.4	0.6	
● VHF 28-14io5	1400	440									
VHF 28-12io5	1200	400									
VHF 28-08io5	800	250									
● VHF 28-06io5	600	180									
VHF 36-16io5	1600	500	36	85	320	0.85	13	125	1.2	0.4	
VHF 36-12io5	1200	400									
VHF 36-08io5	800	250									



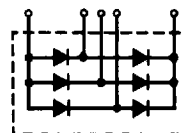
## High Voltage Rectifier Modules, 1~ / 3~

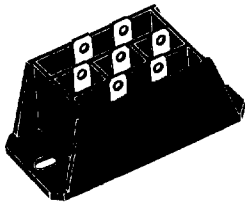
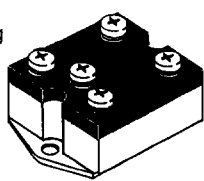
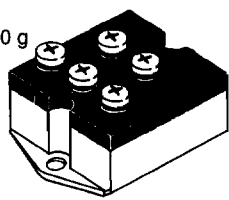
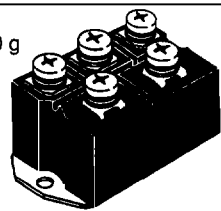
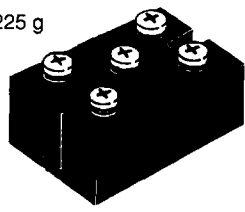
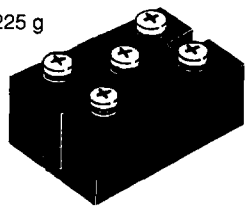
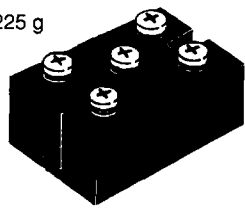
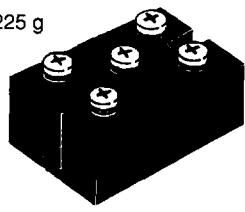
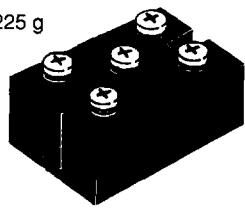
Type	$V_{RRM}$	$V_{VRMS}$	$I_{dAV} \textcircled{1} / \textcircled{2}$		$I_{FSM} 45^\circ C$ 10 ms	$V_{TO}$	$r_F$	$T_{VJM}$	$R_{thJA1} \textcircled{1}$	$R_{thJA2} \textcircled{2}$	Package style
	V	V	A	A	A	V	mΩ	°C	K/W	K/W	See outlines on page 32/33
UGE 0421 AY4	3200	1125	23/7.4	300	1.7	16	150	1.9	7.1	Fig. 39 Weight = 130 g	
UGE 0221 AY4	4800	1750	10/3.8	180	2.55	90	150	1.7	8.0		
UGE 1112 AY4	8000	3000	4.2/2.0	120	4.25	215	150	4.2	10.0		
UGE 3126 AY4	24000	9000	2.0/0.8	70	12	1800	150	2.7	8.7		
UGB 3132 AD	4800	2250	1.3	60	-	-	150	-	-	Fig. 40a	Weight = 150 g
UGB 6124 AG	10500	5000	1.0	50	-	-	150	-	-	Fig. 40a	Weight = 300 g
UGD 6123 AG	7200	3300	1.8	50	-	-	150	-	-	Fig. 40b	Weight = 300 g
UGD 8124 AG	10500	5000	1.2	50	-	-	150	-	-	Fig. 40b	Weight = 300 g



① for oil-cooling with cooling plate,  $T_A = 35^\circ C$  ② for natural air cooling without cooling plate,  $T_A = 45^\circ C$ . Data according to DIN / IEC 747-2/6  
 ● Part numbers have been replaced by the next higher prime product in this category. A = Anode C = Cathode

# Rectifier Bridges, 3~



Type E 72 873 (M) New	V <sub>RM</sub> V	V <sub>VRMS</sub> V	I <sub>AV</sub> A	T <sub>C</sub> °C	I <sub>VM</sub> 45°C 10 ms A	V <sub>TO</sub> V	r <sub>F</sub> mΩ	T <sub>VM</sub> °C	R <sub>thJC</sub> per chip module K/W	R <sub>thJC</sub> per chip module K/W	Package style See outlines on page 33
▶ VUO 30-18NO3 *	1800	575	37	85	300	0.9	11	125	2.4	0.6	Fig. 41 Weight = 50 g  
VUO 30-16NO3	1600	500	37				11		0.4	0.1	
● VUO 20-16NO3	1600	500	30				19				
● VUO 30-14NO3	1400	440	37				11				
● VUO 20-14NO3	1400	440	30				19				
VUO 30-12NO3	1200	400	37				11				
● VUO 20-12NO3	1200	400	30				19				
VUO 30-08NO3	800	250	37				11				
● VUO 20-08NO3	800	250	30				19				
● VUO 30-06NO3	600	180	37				11				
● VUO 20-06NO3	600	180	30				19				
● VUO 30-04NO3	400	125	37				11				
● VUO 20-04NO3	400	125	30				19				
▶ VUO 50-18NO3 *	1800	575	58	85	500	0.9	6	125	1.62	0.6	
VUO 50-16NO3	1600	500							0.27	0.1	
● VUO 50-14NO3	1400	440									
VUO 50-12NO3	1200	400									
VUO 50-08NO3	800	250									
● VUO 50-06NO3	600	180									
● VUO 50-04NO3	400	125									
VUO 25-18NO7 *	1800	575	25	63	400	0.85	12	150	9.3	0.90	Fig. 43 Weight = 135 g  
VUO 25-16NO7	1600	500							1.55	0.15	
VUO 25-14NO7	1400	440									
VUO 25-12NO7	1200	400									
VUO 36-18NO7 *	1800	575	35	62	550	0.8	7.4	150	7.5	0.90	Fig. 44 Weight = 260 g  
VUO 36-16NO7	1600	500							1.25	0.15	
VUO 36-14NO7	1400	440									
VUO 36-12NO7	1200	400									
VUO 35-18NO7 *	1800	575	38	85	400	0.85	12	150	4.2	4.8	Fig. 45 Weight = 160 g  
VUO 35-16NO7	1600	500							0.7	0.8	
● VUO 35-14NO7	1400	440									
VUO 35-12NO7	1200	400									
VUO 55-18NO7 *	1800	575	58	85	750	0.85	8	150	2.7	0.36	Fig. 46 Weight = 225 g  
VUO 55-16NO7	1600	500							0.45	0.06	
● VUO 55-14NO7	1400	440									
VUO 55-12NO7	1200	400									
▶ VUO 62-18NO7 *	1800	575	63	110	550	0.8	8	150	1.45	0.42	Fig. 46 Weight = 225 g  
▶ VUO 62-16NO7	1600	500							0.24	0.07	
▶ VUO 62-12NO7	1200	400									
▶ VUO 62-08NO7	800	250									
▶ VUO 82-18NO7 *	1800	575	88	110	750	0.8	5	150	1.1	0.42	Fig. 46 Weight = 225 g  
▶ VUO 82-16NO7	1600	500							0.183	0.07	
▶ VUO 82-12NO7	1200	400									
▶ VUO 82-08NO7	800	250									
VUO 105-18NO7 *	1800	575	160	85	1500	0.8	5	150	0.83	0.30	Fig. 46 Weight = 225 g  
VUO 105-16NO7	1600	500							0.14	0.05	
● VUO 105-14NO7	1400	440									
VUO 105-12NO7	1200	400									
VUO 125-18NO7 *	1800	575	186	85	1800	0.8	3	150	0.83	0.30	Fig. 46 Weight = 225 g  
VUO 125-16NO7	1600	500							0.14	0.05	
● VUO 125-14NO7	1400	440									
VUO 125-12NO7	1200	400									

\* Delivery time on request - Data according to DIN / IEC 747-2

● Part numbers have been replaced by the next higher prime product in this category.

# Rectifier Bridges, 3~

## Rectifier Bridges, 3~ with fast Diodes and integrated soft-start Thyristor

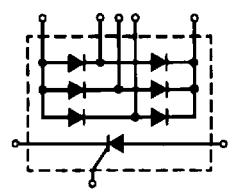
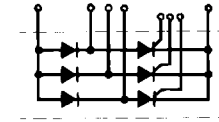
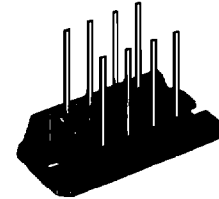
Type E 72 873 (M) New	$V_{RRM}$ V	$V_{VRMS}$ V	$I_{TAV}$ $T_C=85^\circ\text{C}$ A	$I_{RMS}$ $45^\circ\text{C}$ 10 ms A	$V_{TO}$ V	$r_T$ m $\Omega$	$T_{VM}$ $^\circ\text{C}$	$R_{thJC}$ per chip K/W	$R_{thCK}$ per chip K/W	Package style See outlines on page 32	
VUC 25-16go2 VUC 25-14go2 VUC 25-12go2	1600 1400 1200	500 440 400	25	Diode 300	1.2	18	125	2.3	0.6		
VUC 36-16go2 VUC 36-14go2 VUC 36-12go2	1600 1400 1200	500 440 400		36	Thyr. 330	1.1	11	125	0.9		0.2
					Diode 300	1.2	16	125	1.4		0.6
			Thyr. 400		0.85	10	125	0.9	0.2		

Fig. 33 Weight = 28 g



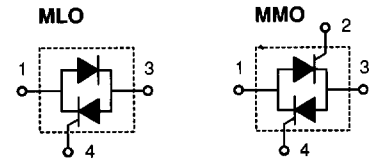
## Half Controlled Rectifier Bridges, 3~

Type E 72 873 (M) New	$V_{RRM}$ V	$V_{VRMS}$ V	$I_{TAV}$ $T_C=100^\circ\text{C}$ A	$I_{RMS}$ $45^\circ\text{C}$ 10 ms A	$V_{TO}$ V	$r_T$ m $\Omega$	$T_{VM}$ $^\circ\text{C}$	$R_{thJC}$ per chip module K/W	$R_{thCK}$ per chip module K/W					
VVZ 12-16go1 VVZ 12-14go1 VVZ 12-12go1	1600 1400 1200	500 440 400	12	110	1.1	30	125	2.5 0.4	0.6 0.1					
VVZ 24-16go1 VVZ 24-14go1 VVZ 24-12go1	1600 1400 1200	500 440 400						24	300	1.0	15	125	2.1 0.35	0.6 0.1
VVZ 40-16go1 VVZ 40-14go1 VVZ 40-12go1	1600 1400 1200	500 440 400											40	320

Data according to DIN / IEC 747-2/6

# AC-Controllers, 1~

$I_{RMS} = 39-86 \text{ A}$



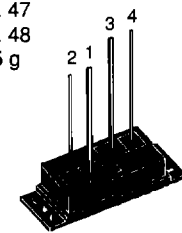
Type E 72 873 (M) New	$V_{RRM}$ V	$V_{VRMS}$ V	$I_{TAV}$ $T_C=85^\circ\text{C}$ A	$I_{RMS}$ $T_C=85^\circ\text{C}$ A	$I_{TSM}$ $45^\circ\text{C}$ 10 ms A	$V_{TO}$ V	$r_T$ m $\Omega$	$T_{VM}$ $^\circ\text{C}$	$R_{thJC}$ per chip module K/W	$R_{thCK}$ per chip module K/W	Package style See outlines on page 33/30	
MLO 36-16io1 MLO 36-12io1	1600 1200	500 400	18	39	360	0.85	15	125	1.3 0.65	1.5 0.75		
MLO 75-16io1 MLO 75-12io1	1600 1200	500 400							39	86		1150
MMO 36-16io1 MMO 36-12io1	1600 1200	500 400	18	39	360	0.85	15	125				
MMO 75-16io1 MMO 75-12io1	1600 1200	500 400							39	86		1150
MMO 62-16io1 MMO 62-12io1	1600 1200	500 400	25	54	400	0.85	12	125				
MMO 74-16io1 MMO 74-12io1	1600 1200	500 400							34	74		600

Fig. 7 SOT-227 B miniBLOC  
Weight = 30 g

Data according to DIN / IEC 747-2/6