

## Controllable Bridge Rectifiers

## **SKBZ 28**

## **Features**

- Sturdy isolated metal baseplate
- Fast-on terminals with solder tips
- · Suitable for wave soldering
- · High surge current rating
- UL recognized, file no. E 63 532

## **Typical Applications**

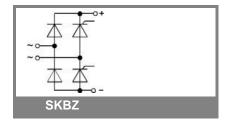
- Controllable single phase rectifierDC power supplies
- DC motor controllers
- . DC motor field controllers

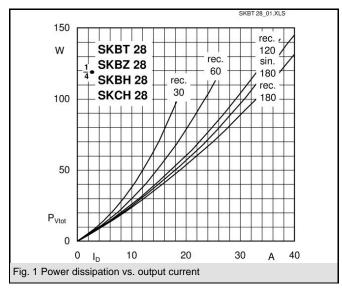
1)	Painted metal shield of minimum 250 x
	250 x 1 mm: R <sub>th(c-a)</sub> = 1,85 K/W

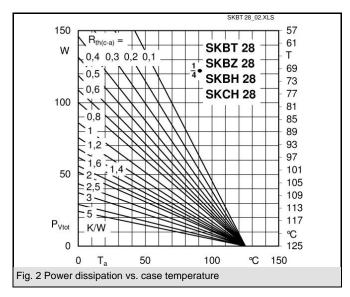
2) Freely suspended or mounted on insulator

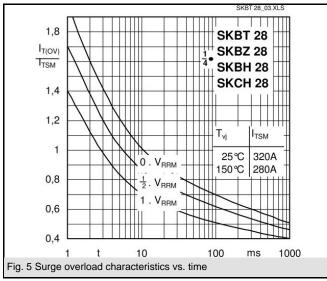
V <sub>RSM</sub>	$V_{RRM}, V_{DRM}$	I <sub>D</sub> = 28 A (full conduction)
V	V	(T <sub>c</sub> = 89 °C)
400	400	SKBZ 28/04
600	600	SKBZ 28/06
800	800	SKBZ 28/08
1200	1200	SKBZ 28/12
1400	1400	SKBZ 28/14

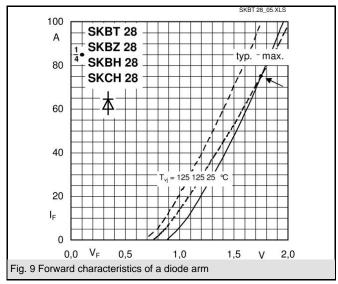
Symbol	Conditions	Values	Units
I <sub>D</sub>	T <sub>c</sub> = 85 °C	30	Α
	T <sub>a</sub> = 45 °C; chassis <sup>1)</sup>	13	Α
	T <sub>a</sub> = 45 °C; P5A/100	15	Α
	T <sub>a</sub> = 45 °C; P13A/125	16	Α
	T <sub>a</sub> = 45 °C; P1A/120	23	Α
$I_{TSM}, I_{FSM}$	$T_{vj} = 25 ^{\circ}\text{C}; 10 \text{ms}$	320	Α
	$T_{vj} = 125 ^{\circ}\text{C}; 10 \text{ms}$	280	A
i²t	T <sub>vj</sub> = 25 °C; 8,3 10 ms	510	A²s
	T <sub>vj</sub> = 125 °C; 8,3 10 ms	390	A²s
$V_T$	T <sub>vj</sub> = 25 °C; I <sub>T</sub> =75 A	max. 2,25	V
$V_{T(TO)}$	T <sub>vj</sub> = 125 °C;	max. 1	V
r <sub>T</sub>	T <sub>vj</sub> = 125 °C	max. 16	mΩ
$I_{DD}; I_{RD}$	$T_{vj}$ = 125 °C; $V_{DD}$ = $V_{DRM}$ ; $V_{RD}$ = $V_{RRM}$	max. 8	mA
$t_{gd}$	$T_{vj} = 25 \text{ °C}; I_G = 1 \text{ A}; di_G/dt = 1 \text{ A/}\mu\text{s}$	1	μs
t <sub>gr</sub>	$V_D = 0.67 \cdot V_{DRM}$	1	μs
(dv/dt) <sub>cr</sub>	T <sub>vj</sub> = 125 °C	max. 500	V/µs
(di/dt) <sub>cr</sub>	T <sub>vj</sub> = 125 °C; f = 50 Hz	max. 50	A/µs
t <sub>q</sub>	$T_{vj} = 125 ^{\circ}\text{C}; \text{ typ.}$	80	μs
I <sub>H</sub>	T <sub>vj</sub> = 25 °C; typ. / max.	50 / 150	mA
IL	$T_{vj}$ = 25 °C; $R_G$ = 33 $\Omega$	100 / 300	mA
V <sub>GT</sub>	T <sub>vj</sub> = 25 °C; d.c.	min. 2	V
I <sub>GT</sub>	$T_{vj}^{3}$ = 25 °C; d.c.	min. 100	mA
$V_{GD}$	$T_{vj} = 125 ^{\circ}\text{C}; \text{d.c.}$	max. 0,25	V
$I_{GD}$	T <sub>vj</sub> = 125 °C; d.c.	max. 3	mA
R <sub>th(j-c)</sub>	per thyristor / diode	1,8	K/W
	total	0,45	K/W
$R_{th(c-s)}$	total	0,1	K/W
$R_{th(j-a)}$	total <sup>2)</sup>	15	K/W
$T_{vj}$		- 40 <b>+</b> 125	°C
$T_{stg}$		- 40 <b>+</b> 125	°C
V <sub>isol</sub>	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 ( 3000 )	V
$M_s$	case to heatsink	2	Nm
$M_t$		n.a.	Nm
m		66	g
Case	SKBZ	G 24	

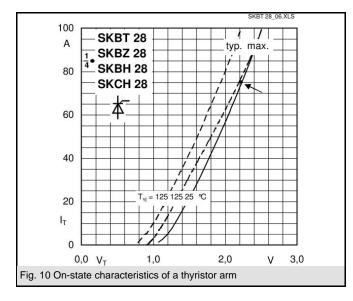


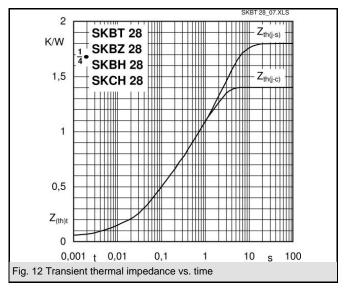


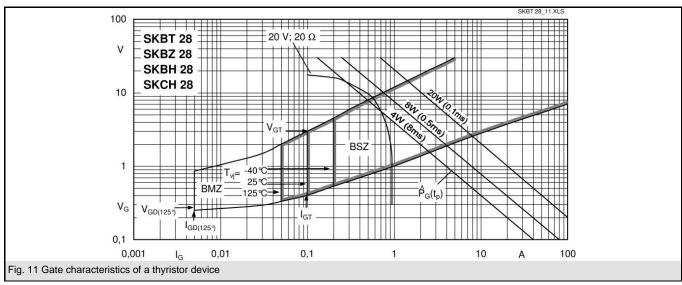


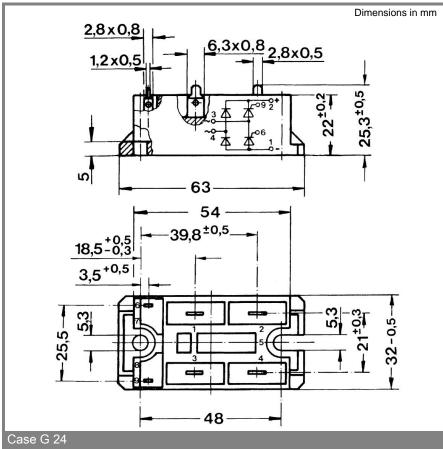












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