

SEMIPONTTM 5

Half Controlled 3-phase Bridge Rectifier

SKDH 145

Target Data

Features

- Compact design
- · Two screws mounting
- Heat transfer and isolation through direct copper board (low R th)
- Low resistance in steady-state and high reliability
- · High surge currents
- UL -recognized, file no. E 63 532

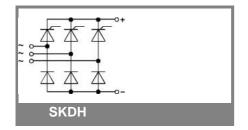
Typical Applications

- For DC drives with a fixed direction of rotation
- Controlled field rectifier for DC motors
- · Controlled battery charger

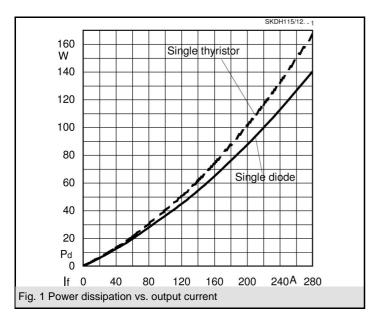
V _{RSM}	V_{RRM}, V_{DRM}	I _D = 140 A (full conduction)
V	V	(T _s = 80 °C)
1300	1200	SKDH 145/12
1700	1600	SKDH 145/16

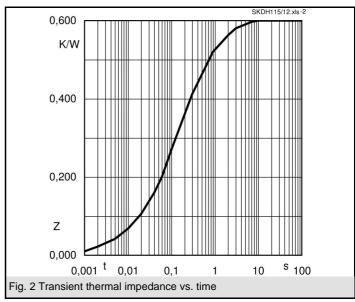
Symbol	Conditions	Values	Units
I _D	T _s = 80 °C	110	Α
I _{TSM} , I _{FSM}	T _{vi} = 25 °C; 10 ms	1350	А
	T _{vi} = 125 °C; 10 ms	1250	Α
i²t	T _{vj} = 25 °C; 8,3 10 ms	9100	A²s
	T _{vj} = 125 °C; 8,3 10 ms	7800	A²s
V_T, V_F	T _{vi} = 25 °C; I _T , I _F =150A	max. 1,6	V
V _{T(TO)} / VF(TO)	$T_{vj}^{y} = 125 ^{\circ}\text{C};$	max. 0,9	V
r_T	T _{vj} = 125 °C	max. 5	mΩ
I_{DD} ; I_{RD}	T_{vj} = 125 °C; V_{DD} = V_{DRM} ; V_{RD} = V_{RRM}	max. 20	mA
t _{gd}	$T_{vj} = {^{\circ}C}; I_G = A; di_G/dt = A/\mu s$		μs
t _{gr}	$V_D = \cdot V_{DRM}$		μs
(dv/dt) _{cr}	T _{vj} = 125 °C	max. 500	V/µs
(di/dt) _{cr}	T _{vj} = 125 °C; f = 5060 Hz	max. 50	A/µs
t_q	T_{vj} = 125 °C; typ.	150	μs
I _H	T _{vj} = 25 °C; typ. / max.	- / 250	mA
I_L	$T_{vj} = 25 ^{\circ}\text{C}; R_{G} = 33 \Omega$	- / 600	mA
V _{GT}	T_{vj} = 25 °C; d.c.	min. 3	V
I_{GT}	$T_{v_i} = 25 ^{\circ}\text{C}; \text{d.c.}$	min. 150	mA
V_{GD}	T_{vj} = 125 °C; d.c.	max. 0,25	V
I_{GD}	T _{vj} = 125 °C; d.c.	max. 6	mA
			K/W
_			K/W
$R_{th(j-s)}$	per thiristor / diode	0,63	K/W
T_{vi}		- 40 + 125	°C
T _{stg}		- 40 + 125	°C
T _{solder}	terminals	260	°C
V _{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 (3000)	V
M _s	to heatsink	2,5	Nm
M _t			Nm
m	approx.	75	g
Case	SEMIPONT 5	G 61	

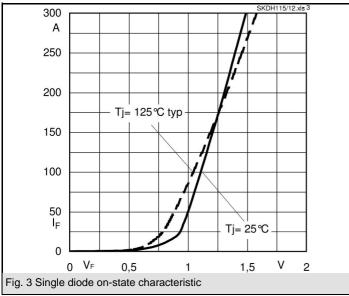
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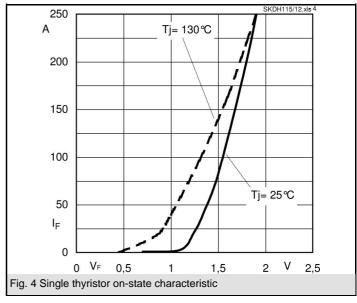


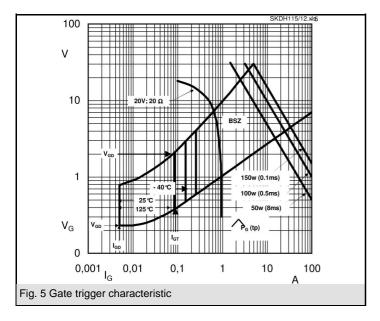
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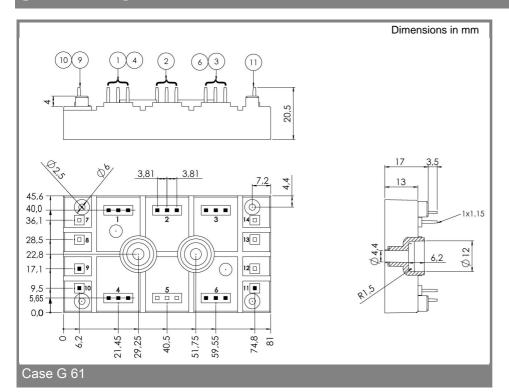


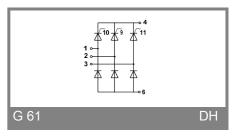






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