

SKDT 230



SEMIPONT® 7

Full Controlled Bridge Rectifier

SKDT 230

Preliminary Data

Features

- Robust plastic case with screw terminals
- Heat transfer through aluminium oxide ceramic isolated metal base plate
- Blocking voltage up to 1800V
- High surge current
- lead free solder
- UL -recognition applied for file no. E 63 532

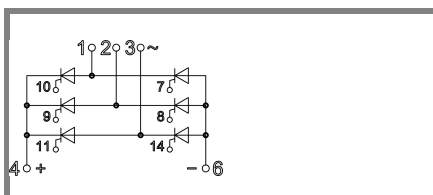
Typical Applications

- Power supplies for electronic equipment
- Field rectifiers for DC motors
- Battery charger rectifiers

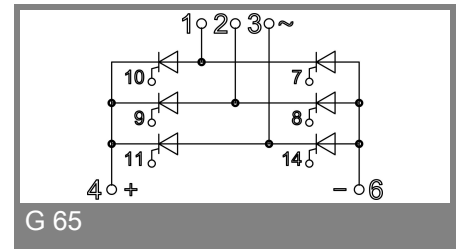
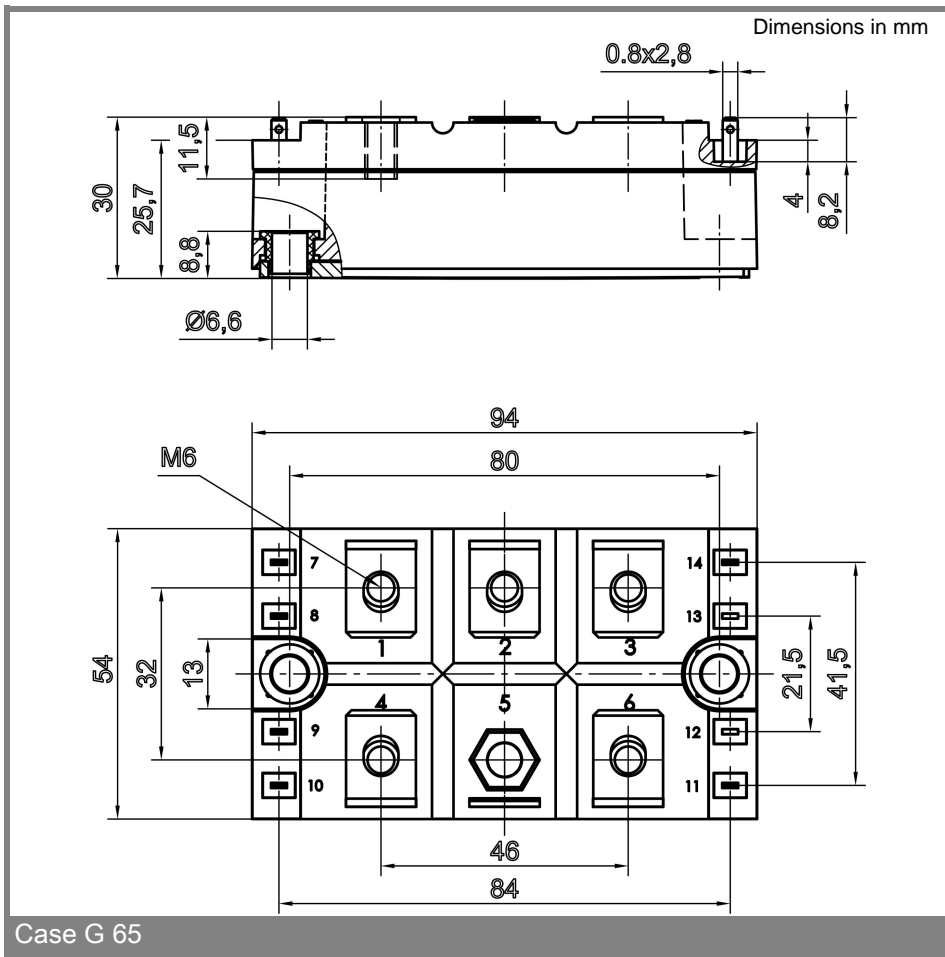
1) available on request

V_{RSM} V	V_{RRM}, V_{DRM} V	$I_D = 230$ A (full conduction) ($T_c = 80$ °C)
900	800	SKDT 230/08
1300	1200	SKDT 230/12
1700	1600	SKDT 230/16
1900	1800	SKDT 230/18 ¹⁾

Symbol	Conditions	Values	Units
I_D	$T_c = 100$ °C	165	A
	$T_c = 85$ °C	215	
I_{TSM}	$T_{vj} = 25$ °C; 10 ms	1450	A
	$T_{vj} = 130$ °C; 10 ms	1250	A
i^2t	$T_{vj} = 25$ °C; 8,3 ... 10 ms	10510	A ² s
	$T_{vj} = 130$ °C; 8,3 ... 10 ms	7810	A ² s
V_T	$T_{vj} = 25$ °C; $I_T = 300$ A	max. 2,25	V
$V_{T(TO)}$	$T_{vj} = 130$ °C;	0,9	V
r_T	$T_{vj} = 130$ °C	5	mΩ
I_{DD}, I_{RD}	$T_{vj} = 130$ °C; $V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$	max. 20	mA
t_{gd}	$T_{vj} = 25$ °C; $I_G = 1$ A; $di_G/dt = 1$ A/μs	1	μs
t_{gr}	$V_D = 0,67 \cdot V_{DRM}$	2	μs
$(dv/dt)_{cr}$	$T_{vj} = 130$ °C	max. 1000	V/μs
$(di/dt)_{cr}$	$T_{vj} = 130$ °C; $f = 50$ Hz	max. 200	A/μs
t_q	$T_{vj} = 130$ °C; typ.	80	μs
I_H	$T_{vj} = 25$ °C; typ. / max.	150 / 250	mA
I_L	$T_{vj} = 25$ °C; $R_G = 33$ Ω	300 / 600	mA
V_{GT}	$T_{vj} = 25$ °C; d.c.	min. 3	V
I_{GT}	$T_{vj} = 25$ °C; d.c.	min. 200	mA
V_{GD}	$T_{vj} = 130$ °C; d.c.	max. 0,25	V
I_{GD}	$T_{vj} = 130$ °C; d.c.	max. 6	mA
$R_{th(j-c)}$	per thyristor	0,32	K/W
	total	0,0533	K/W
$R_{th(c-s)}$	total	0,03	K/W
T_{vj}		- 40 ... + 130	°C
T_{stg}		- 40 ... + 125	°C
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 (3000)	V
M_s	to heatsink	5 ± 15%	Nm
M_t	to terminals	5 ± 15%	Nm
a		5 * 9,81	m/s ²
m	approx.	250	g
Case		G 65	



SKDT



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