

# 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

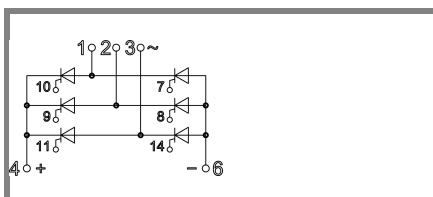
#### Typical Applications

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

1) available on request

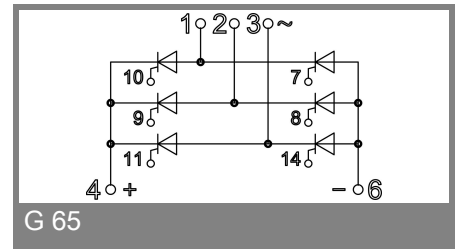
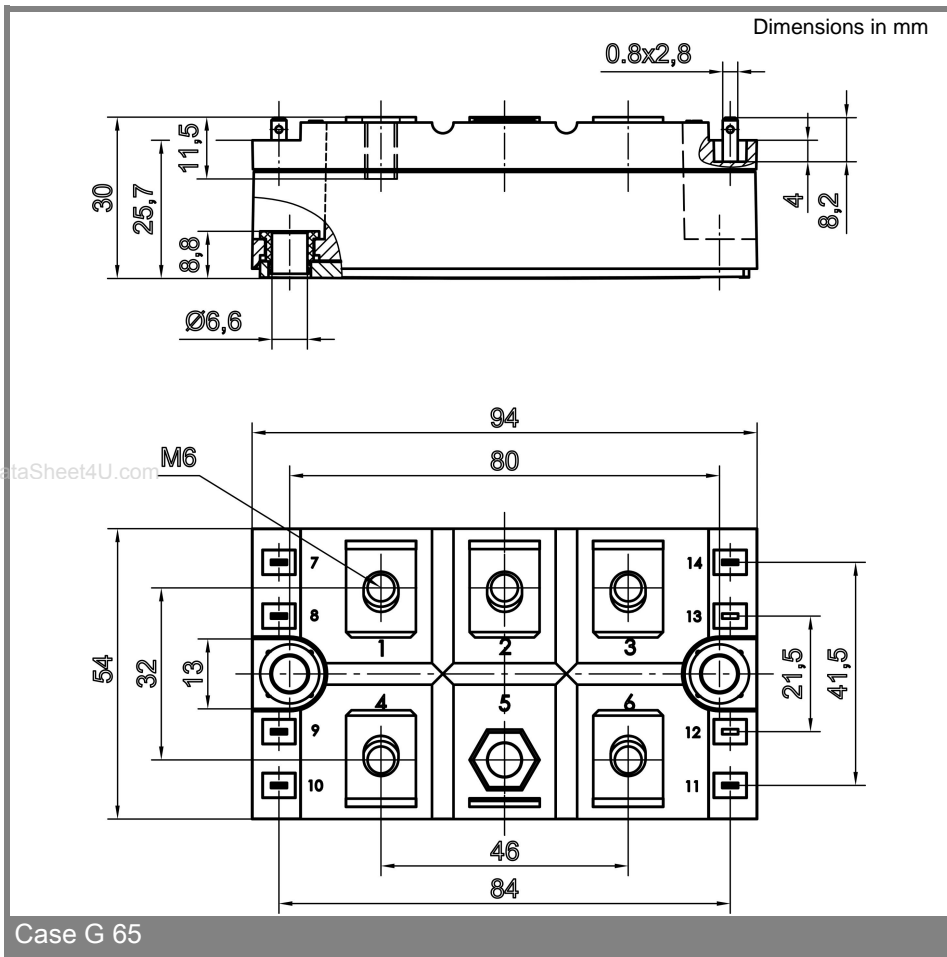
$V_{RSM}$ V	$V_{RRM}, V_{DRM}$ V	$I_D = 230$ A (full conduction) ( $T_c = 80$ °C)
900	800	SKDT 230/08
1300	1200	SKDT 230/12
1700	1600	SKDT 230/16
1900	1800	SKDT 230/18 <sup>1)</sup>

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 <sup>2</sup> s
	$T_{vj} = 130$ °C; 8,3 ... 10 ms	7810	A <sup>2</sup> 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 <sup>2</sup>
m	approx.	250	g
Case		G 65	



**SKDT**

# SKDT 230



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