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

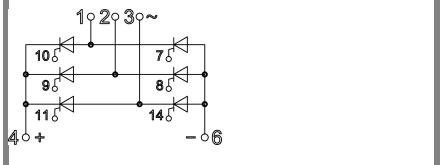
Typical Applications

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

1) available on request

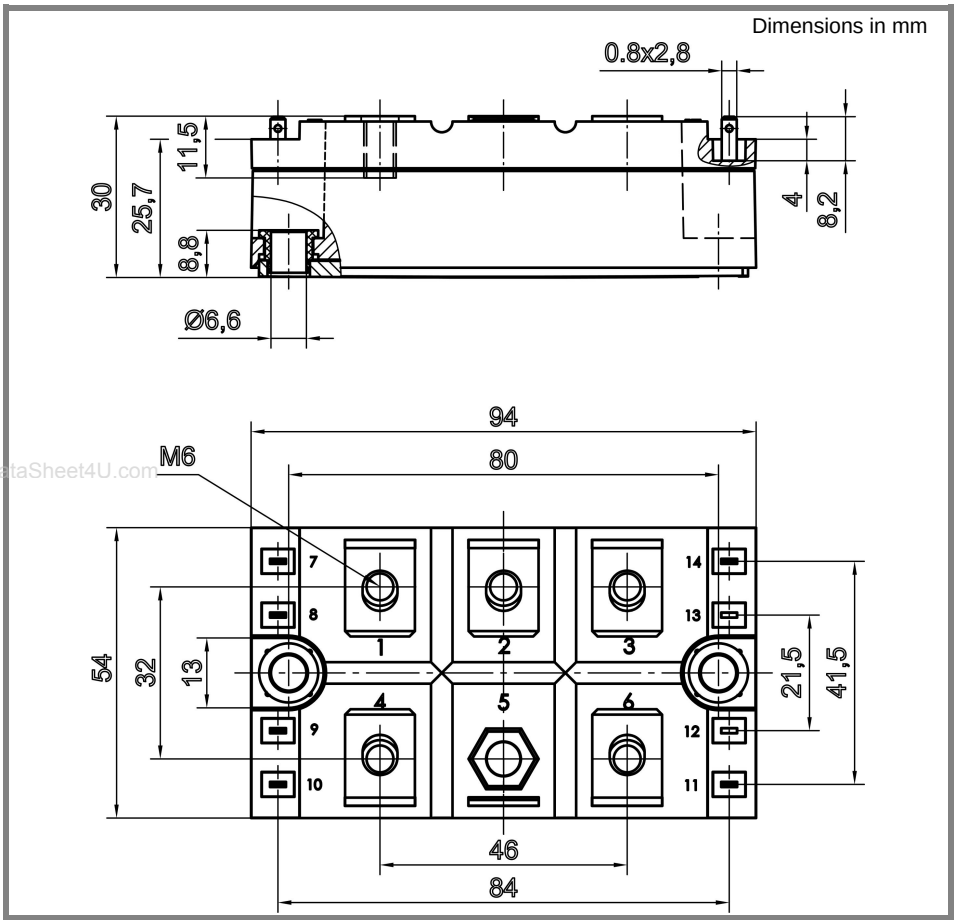
V_{RSM} V	V_{RRM}, V_{DRM} V	I_D = 230 A (full conduction) (T_c = 80 °C)
900	800	SKDT 230/08
1300	1200	SKDT 230/12
1700	1600	SKDT 230/16
1900	1800	SKDT 230/18[1)]

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
i²t	T_{vj} = 25 °C; 8,3 ... 10 ms	10510	A²s
	T_{vj} = 130 °C; 8,3 ... 10 ms	7810	A²s
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 · 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/s²
m	approx.	250	g
Case		G 65	

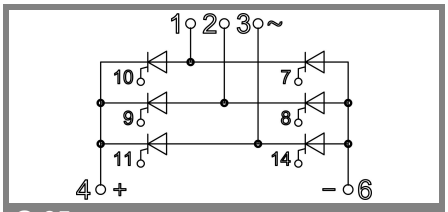


SKDT

Dimensions in mm



Case G 65



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