

V_{RSM}	V_{RRM} V_{DRM}	I_{RMS} (maximum values for continuous operation) ($T_h = 80\text{ °C}$) 110 A
V	V	
1300 1700	1200 1600	SKDT 115/12 SKDT 115/16

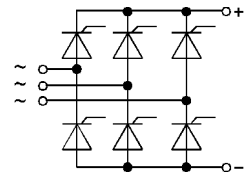
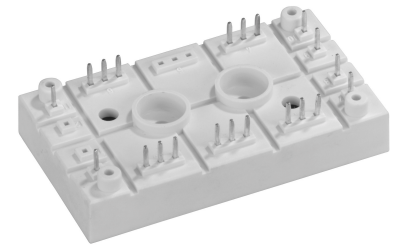
SEMIPONT™ 5

Bridge Rectifier

SKDT 115

Preliminary Data

Symbol	Conditions	SKDT 115	Units
I_D	$T_h = 80\text{ °C}$	110	A
I_{TSM}	$T_{vj} = 25\text{ °C}; 10\text{ ms}$ $T_{vj} = 125\text{ °C}; 10\text{ ms}$	– 1 050	A A
i^2t	$T_{vj} = 25\text{ °C}; 8,3...10\text{ ms}$ $T_{vj} = 125\text{ °C}; 8,3...10\text{ ms}$	– 5 500	A^2s A^2s
$(dv/dt)_{cr}$	$T_{vj} = 125\text{ °C}$	500	$V/\mu s$
$(di/dt)_{cr}$	$T_{vj} = 125\text{ °C}; f = 50...60\text{ Hz}$	50	$A/\mu s$
t_q	$T_{vj} = 125\text{ °C}; \text{typ.}$	150	μs
I_H	$T_{vj} = 25\text{ °C}; \text{typ.}$	200	mA
I_L	$T_{vj} = 25\text{ °C}; R_G = 33\ \Omega; \text{typ.}$	400	mA
V_T	$T_{vj} = 25\text{ °C}; I_T = 120\text{ A}; \text{max.}$	1,8	V
$V_{T(TO)}$	$T_{vj} = 125\text{ °C}$	1,1	V
r_T	$T_{vj} = 125\text{ °C}$	6	$m\Omega$
$I_{DD}; I_{RD}$	$T_{vj} = 125\text{ °C}; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$	20	mA
V_{GT}	$T_{vj} = 25\text{ °C}; \text{dc}$	3	V
I_{GT}	$T_{vj} = 25\text{ °C}; \text{dc}$	150	mA
V_{GD}	$T_{vj} = 125\text{ °C}; \text{dc}$	0,25	V
I_{GD}	$T_{vj} = 125\text{ °C}; \text{dc}$	5	mA
R_{thjh}	per thyristor	0,84	K/W
T_{vjmax}		– 40 ... + 125	$^{\circ}C$
T_{stg}		– 40 ... + 125	$^{\circ}C$
T_{solder}	terminals, 10 s	260	$^{\circ}C$
V_{isol}	a.c. 50 Hz; r.m.s. 1 s/1 min	3000 / 2500	V~
$M_{1,2}$	mounting torque, SI Units	2,5	Nm
w		75	g
Case		G 58	



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
- Glass passivated thyristor chips
- Up to 1600 V reverse voltage
- UL recognized, file no. E 63 532

Typical Applications

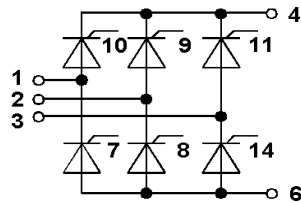
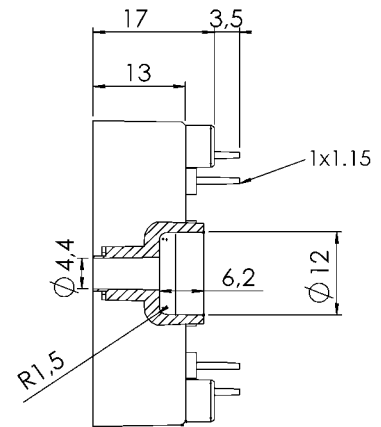
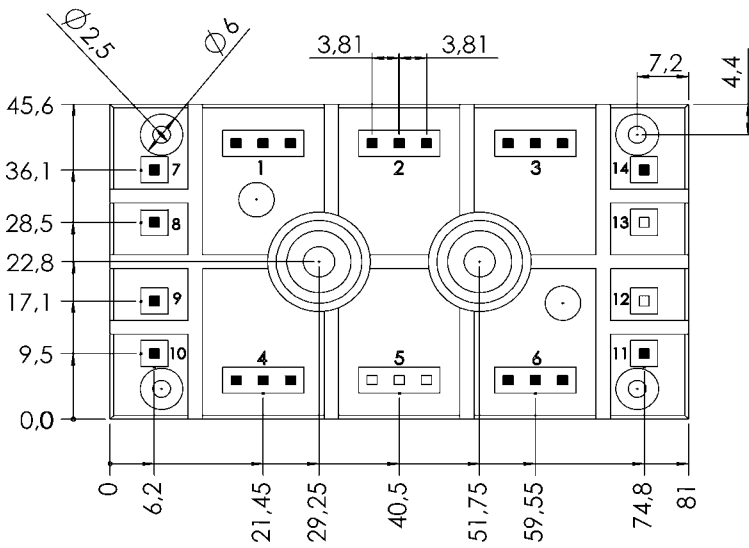
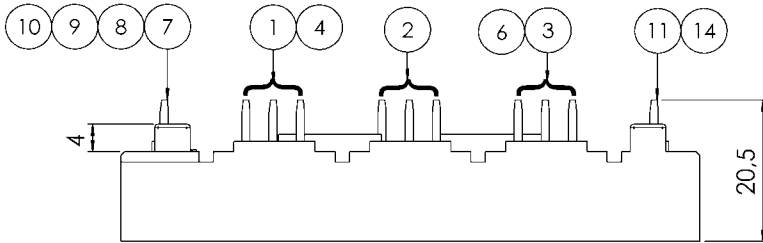
- DC and AC drives
- Controlled field rectifiers for DC motots
- Controlled battery charger

SKDT 115

SKDT 115

Case G 58

SEMIPONT™ 5



Dimensions in mm

This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.