SKUT 115



SEMIPONTTM 5

Three phase antiparallel Thyristor Module

SKUT 115

Target Data

Features

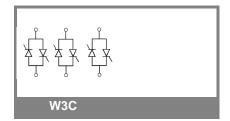
- Compact design
- · Two screws mounting
- Heat transfer and isolation through direct copper board (Low R_{th})
- Low resistance in Steady-State and high reliability
- High surge currents
- Glass passived thyristors chips
- Up to 1600V reverse voltage
- UL recognized, file no. E 63 532

Typical Applications*

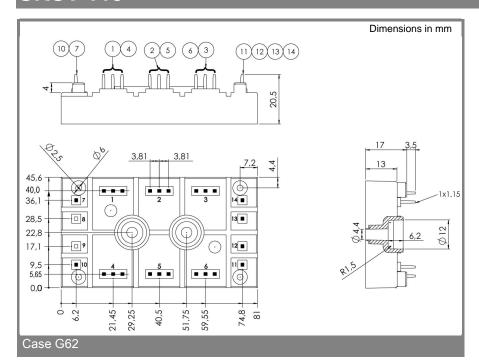
- Soft starter
- Light control (e.g. studios, theaters)
- Temperature control (e.g. oven, chemical processes)

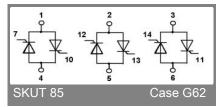
V _{RSM}	V_{RRM}, V_{DRM}	I _{RMS} = 105 A (full conduction)
V	V	(T _s = 85 °C)
1300	1200	SKUT 115/12
1700	1600	SKUT 115/16

Symbol	Conditions	Values	Units
I _{RMS}	W3C ; sin. 180° ; T _s = 85°C	105	Α
	; sin. 180° ;		Α
I _{TSM}	T _{vi} = 25 °C ; 10 ms		Α
	T _{vj} = 125 °C ; 10 ms	1250	Α
i²t	T _{vj} = 25 °C ; 10 ms		A²s
	T _{vj} = 125 °C ; 8,310 ms	7800	A²s
V_T	T _{vj} = 25 °C, I _T = 150 A	max. 1,6	V
$V_{T(TO)}$	T _{vj} = 125 °C	max. 0,9	V
r _T	T _{vi} = 125 °C	max. 5	mΩ
$I_{DD};I_{RD}$	$T_{vj} = 25 ^{\circ}\text{C}, V_{RD} = V_{RRM}$	max. 1	mA
	T_{vj} = 125 °C, $V_{RD} = V_{RRM}$	max. 20	mA
t_{gd}	$T_{vj} = 25 ^{\circ}\text{C}, I_{G} = 1 \text{A}; di_{G}/dt = 1 \text{A}/\mu\text{s}$	1	μs
t _{gr}	$V_{D} = 0.67 * V_{DRM}$	2	μs
(dv/dt) _{cr}	T _{vi} = 125 °C	500	V/µs
(di/dt) _{cr}	T _{vi} = 125 °C; f= 5060 Hz	100	A/µs
t _q	$T_{vi} = 125 ^{\circ}\text{C}$; typ.	150	μs
I _H	T _{vj} = 25 °C; typ. / max.	200	mA
I _L	T_{vj} = 25 °C; R_G = 33 Ω ; typ. / max.	600	mA
V _{GT}	T _{vj} = 25 °C; d.c.	min. 3	V
I _{GT}	$T_{vj}^{0} = 25 ^{\circ}\text{C}; \text{d.c.}$	min. 150	mA
V_{GD}	$T_{vj} = 125 ^{\circ}\text{C}; \text{d.c.}$	max. 0,25	V
I_{GD}	T _{vj} = 125 °C; d.c.	max. 6	mA
R _{th(j-s)}	sin 180°C per Thyristor	0,63	K/W
			K/W
T_{vj}		-40+125	°C
T _{stg}		-40+125	°C
T _{sold}	Terminals, 10s max	260	°C
V _{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
M _s	Mounting torque to Heatsink, SI units	2,5	Nm
M _t			Nm
a			m/s²
m		75	g
Case	SEMIPONT 5	G62	



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* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.