

SCD71

Power Rectifier Diodes



Applications

- Power Supplies
- Uncontrolled Rectifiers
- Battery Chargers

Features

- Full blocking capability over wide temperature range
- Hermetic metal case with glass insulator
- Threaded Stud

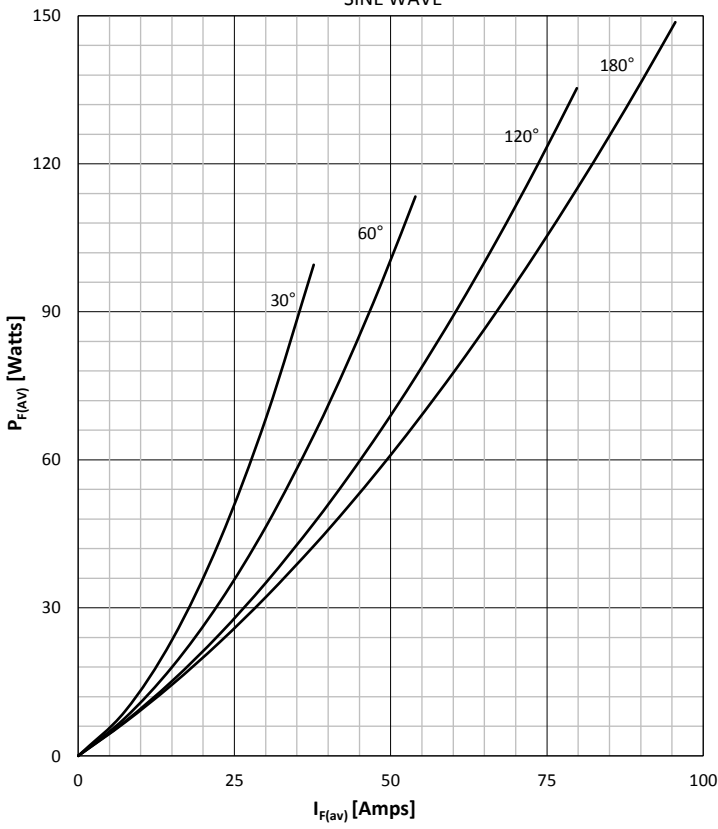
Key Parameters

V_{RRM}	= 1800V
$I_{F(AV)}$	= 95A
I_{FSM}	= 1150A
$V_{F(TO)}$	= 0.85V
r_F	= 3.0mΩ

Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V_{RRM}	Repetitive peak reverse voltage		180	200 - 1800	V
V_{RSM}	Non-repetitive peak reverse voltage		180	300 - 1900	V
I_{RRM}	Repetitive peak reverse current	$V = V_{RRM}$	180	10	mA
CONDUCTING					
$I_{F(AV)}$	Mean forward current	180° sin ,50 Hz, T _c =100°C T _c = 125°C		95 70	A
I_{FRMS}	RMS current			150	A
I_{FSM}	Surge forward current	Sine wave, 10 ms Without reverse voltage	25	1150	A
			180	1000	A
$I^2 t$	$I^2 t$	Sine wave, 10 ms Without reverse voltage	25	6612	A ² s
			180	5000	A ² s
V_F	Forward voltage	On-state current = 210A	180	1.50	V
$V_{F(TO)}$	Threshold voltage		180	0.85	V
r_F	Forward slope resistance		180	3.0	mΩ
MOUNTING					
$R_{th(j-c)}$	Thermal impedance, sin 180°	Junction to case		0.55	°C/W
$R_{th(c-h)}$	Thermal impedance	Case to heatsink		0.20	°C/W
T_j	Max. junction temperature			180	°C
T_{stg}	Storage temperature			-40 180	°C
M	Mounting torque			4	NM
W	Weight (Approx.)			40	gm

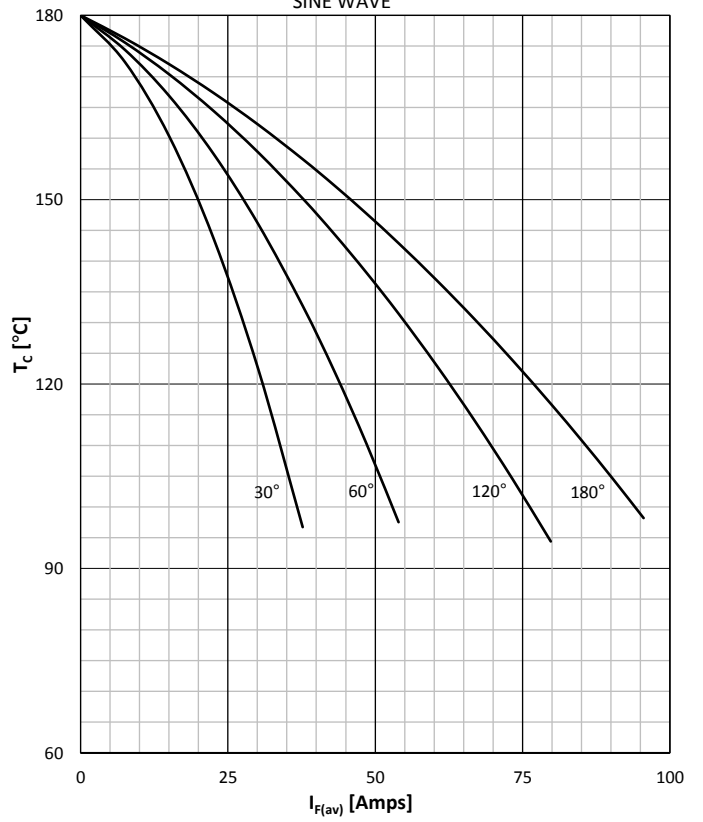
DISSIPATION CHARACTERISTICS

SINE WAVE



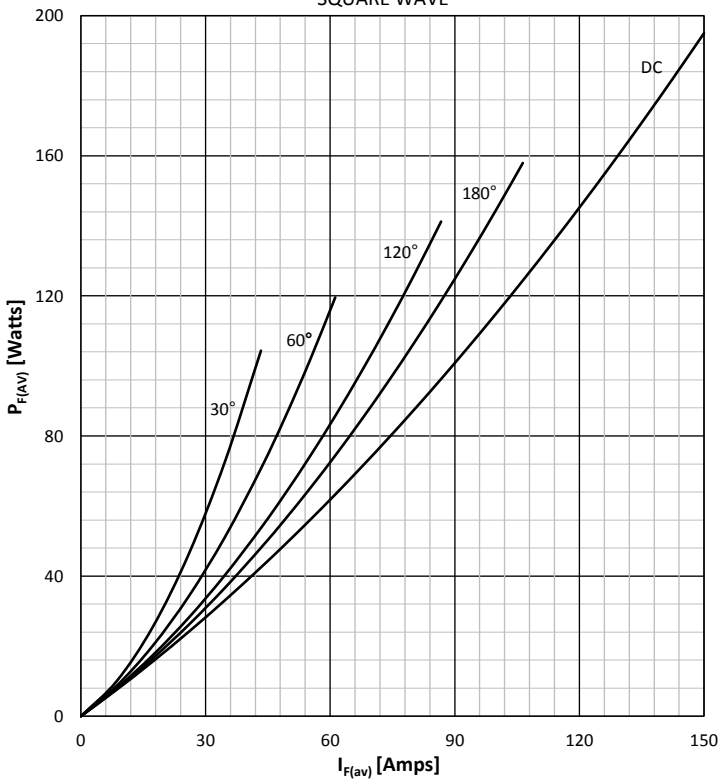
FORWARD CURRENT DERATING CURVE

SINE WAVE



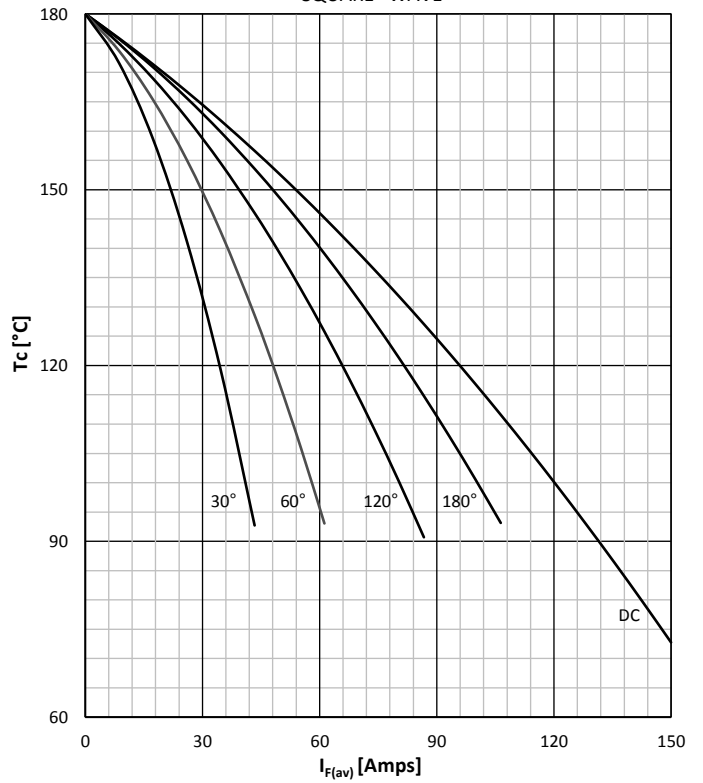
DISSIPATION CHARACTERISTICS

SQUARE WAVE

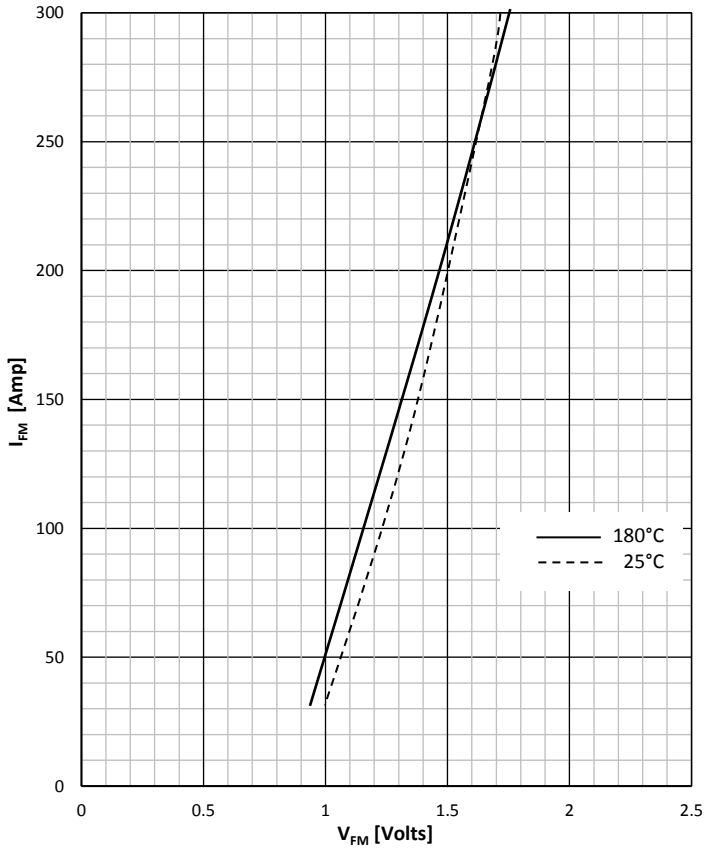


FORWARD CURRENT DERATING CURVE

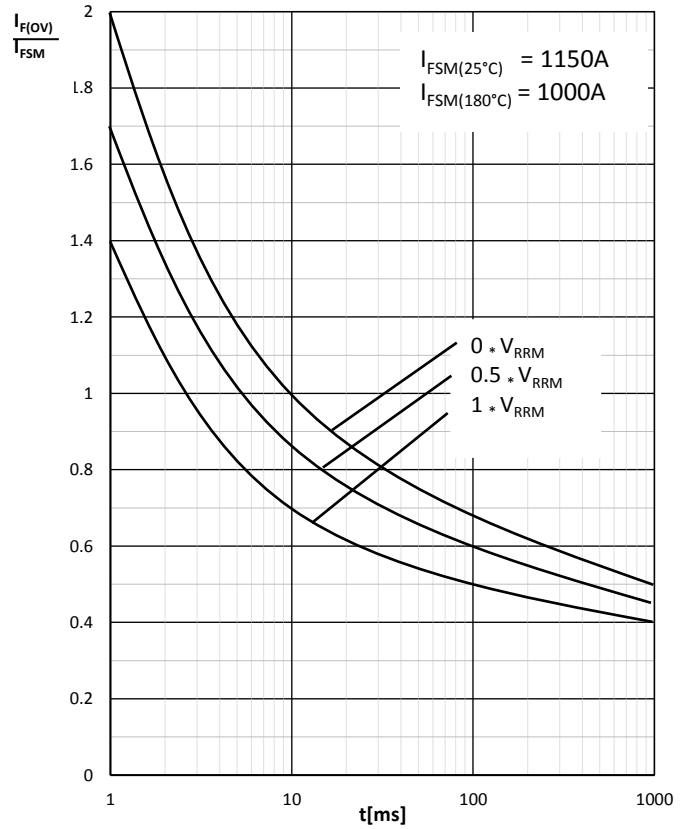
SQUARE WAVE



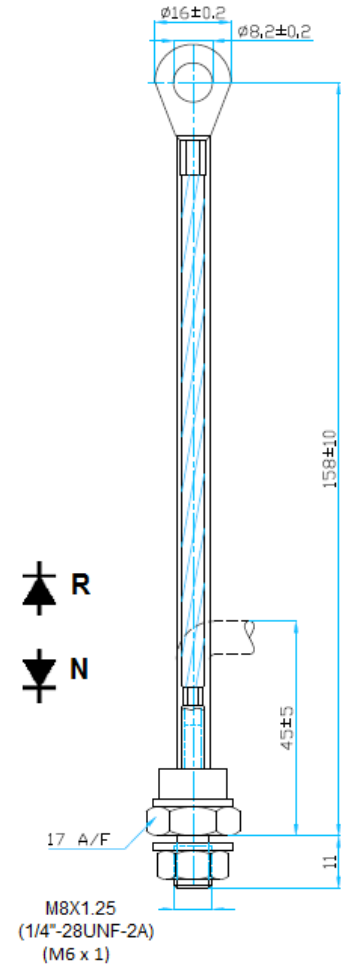
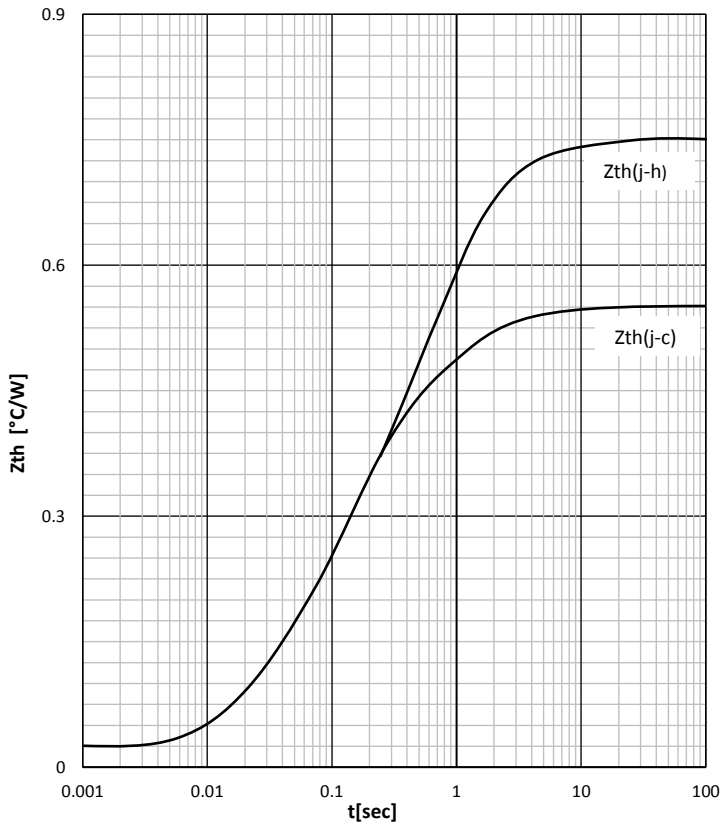
FORWARD CHARACTERISTIC



SURGE CHARACTERISTICS



TRANSIENT THERMAL IMPEDANCE



Scomes srl reserves the right to change any specification without notice

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