



## Stud Diode

## Fast Recovery Rectifier Diode

SKN 2F17

SKR 2F17

### Features

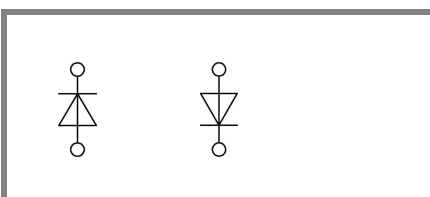
- Small recovered charge
- Soft recovery
- Up to 1000 V reverse voltage
- Hermetic metal case with glass insulator
- Threaded stud ISO M5 or 10-32 UNF
- SKN: anode to stud  
SKR: cathode to stud

### Typical Applications\*

- Inverse diode for power transistor, GTO thyristor, asymmetric thyristor
- SMPS, inverters, choppers
- for severe ambient conditions

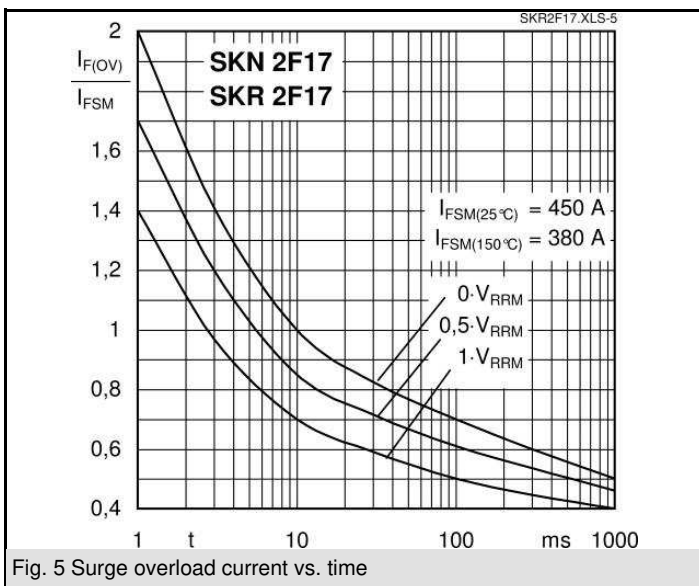
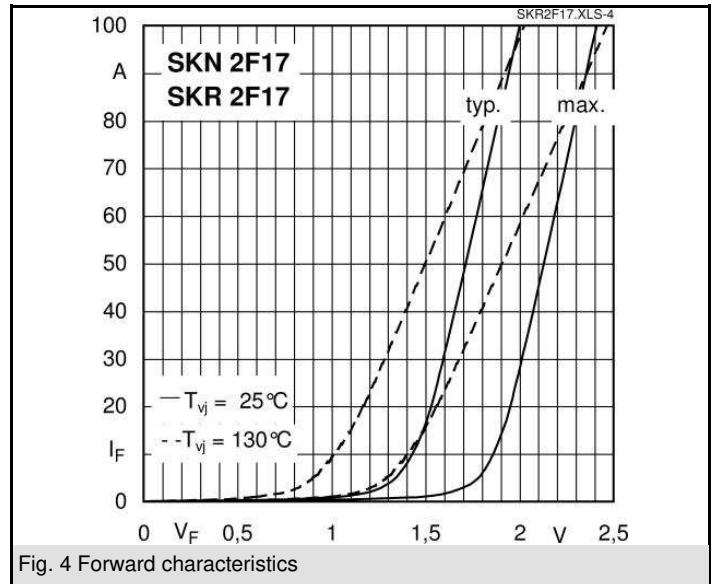
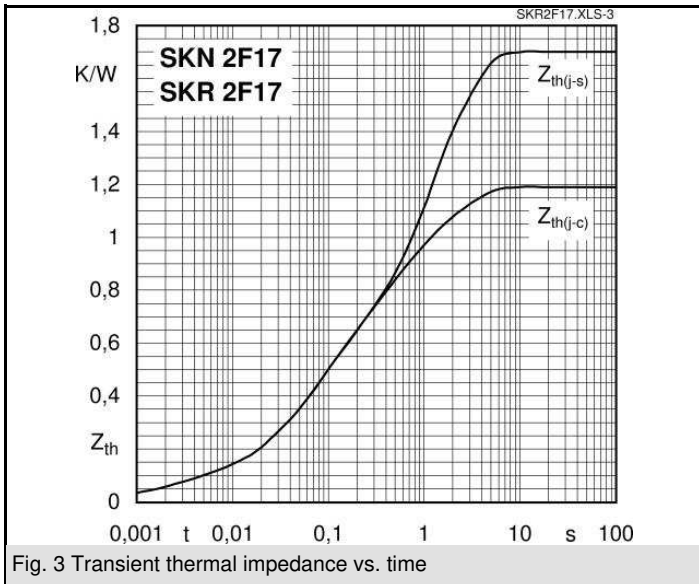
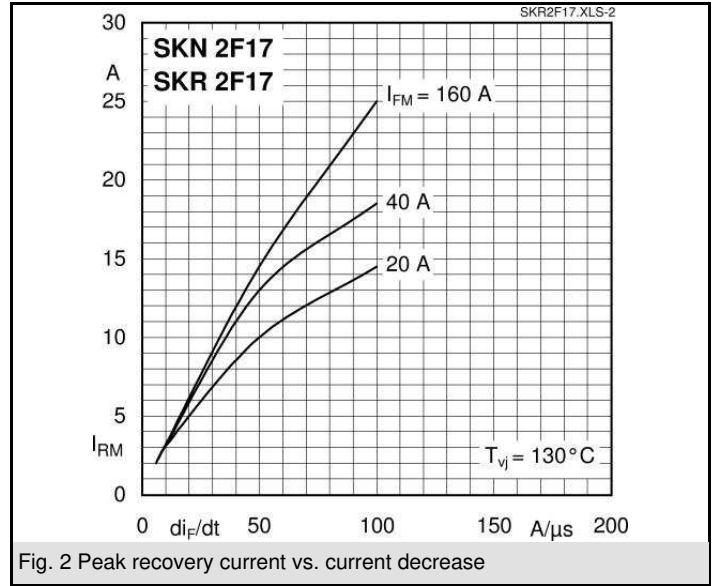
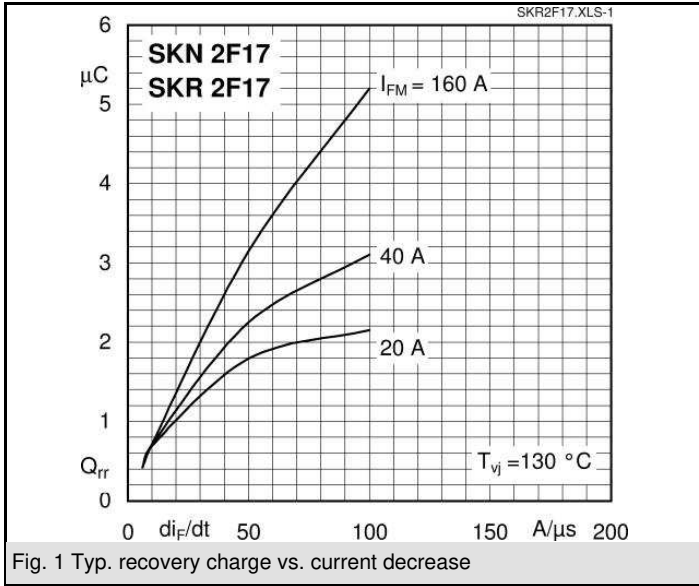
$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 41$ A (maximum value for continuous operation) $I_{FAV} = 17$ A (sin. 180; 5000Hz; $T_c = 113$ °C)	
400	400	SKN 2F17/04	SKR 2F17/04
400	400	SKN 2F17/04UNF	SKR 2F17/04UNF
600	600	SKN 2F17/06	SKR 2F17/06
600	600	SKN 2F17/06UNF	SKR 2F17/06UNF
800	800	SKN 2F17/08	SKR 2F17/08
800	800	SKN 2F17/08UNF	SKR 2F17/08UNF
1000	1000	SKN 2F17/10	SKR 2F17/10
1000	1000	SKN 2F17/10UNF	SKR 2F17/10UNF

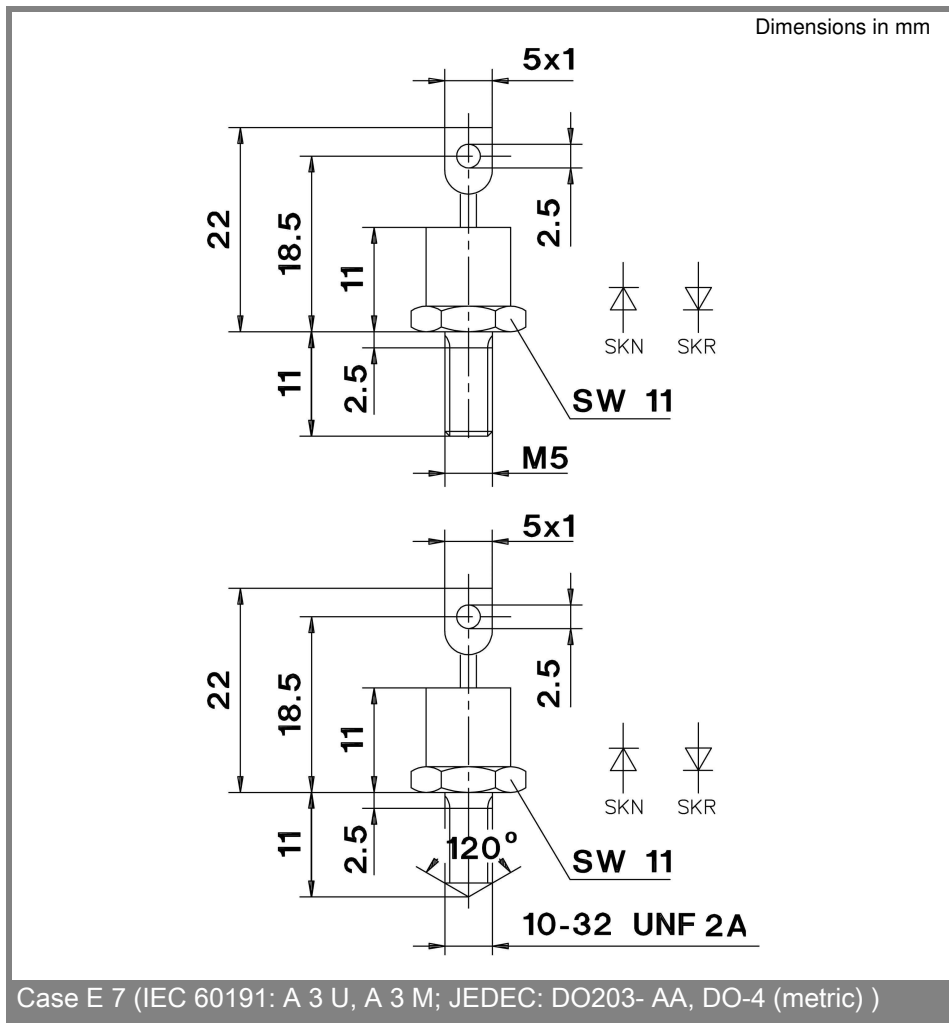
Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 85$ (100) °C	26 (22)	A
$I_{FAV}$	K5,5; $T_a = 45$ °C; sin. 180; 5000 Hz	10	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms	450	A
	$T_{vj} = 150$ °C; 10 ms	380	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	1000	A <sup>2</sup> s
	$T_{vj} = 150$ °C; 8,3 ... 10 ms	720	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 50$ A	max. 2,15	V
$V_{(TO)}$	$T_{vj} = 130$ °C	max. 1,3	V
$r_T$	$T_{vj} = 130$ °C	max. 12	mΩ
$I_{RD}$	$T_{vj} = 25$ °C; $V_{RD} = V_{RRM}$	max. 0,2	mA
$I_{RD}$	$T_{vj} = 130$ °C; $V_{RD} = V_{RRM}$	max. 16	mA
$Q_{rr}$	$T_{vj} = 130$ °C, $I_F = 50$ A,	1	μC
$I_{RM}$	$-di/dt = 15$ A/μs, $V_R = 30$ V	4,5	A
$t_{rr}$		440	ns
$E_{rr}$		-	mJ
$R_{th(j-c)}$		1,2	K/W
$R_{th(c-s)}$		0,5	K/W
$T_{vj}$		- 40 ... + 150	°C
$T_{stg}$		- 55 ... + 150	°C
$V_{isol}$		-	V~
$M_s$	to heatsink	1,5	Nm
$a$		5 * 9,81	m/s <sup>2</sup>
$m$	approx.	7	g
Case		E7	



SKN

SKR





\* 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.