GKN240/04 thru GKN240/18

Silicon Standard Recovery Diode

V_{RRM} = 400 V - 1800 V

I_F = 320 A

Features

- High Surge Capability
- Types from 400 V to 1800 V V_{RRM}
- Equivalent to SKN240 Series
- Not ESD Sensitive

DO-9 Package



GKN

Maximum ratings, at T_j = 25 °C, unless otherwise specified (GKR has leads reversed)

Parameter	Symbol	Conditions	GKN240/04	GKN240/08	GKN240/12	GKN240/14	GKN240/16	GKN240/18	Unit
Repetitive peak reverse voltage	V_{RRM}		400	800	1200	1400	1600	1800	V
DC blocking voltage	V_{DC}		400	800	1200	1400	1600	1800	V
Continuous forward current	I_F	$T_C \leq 100$ °C	320	320	320	320	320	320	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	T_C = 25 °C, t_p = 10 ms	6000	6000	6000	6000	6000	6000	A
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C

Electrical characteristics, at Tj = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	GKN240/04	GKN240/08	GKN240/12	GKN240/14	GKN240/16	GKN240/18	Unit
Diode forward voltage	V_F	I_F = 60 A, T_j = 25 °C	1.4	1.4	1.4	1.4	1.4	1.4	V
Reverse current	I_R	$V_R = V_{RRM}$, T_j = 180 °C	60	60	60	60	60	60	mA
Thermal characteristics									
Thermal resistance, junction - case	R_{thJC}		0.20	0.20	0.20	0.20	0.20	0.20	K/W

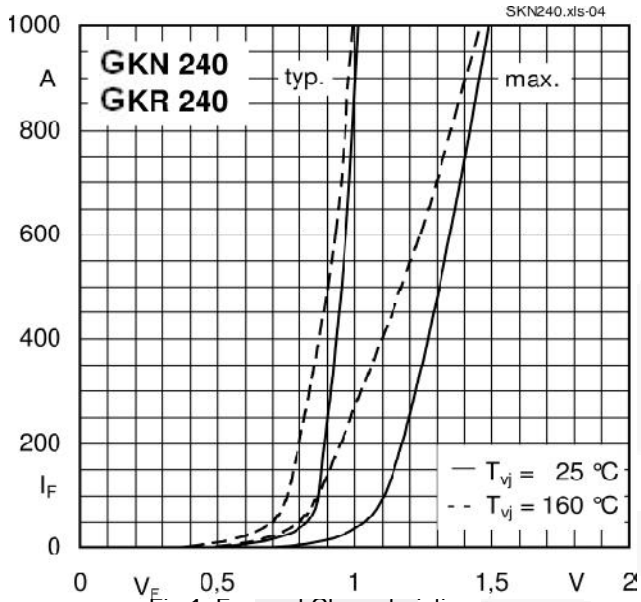


Fig 1: Forward Characteristics

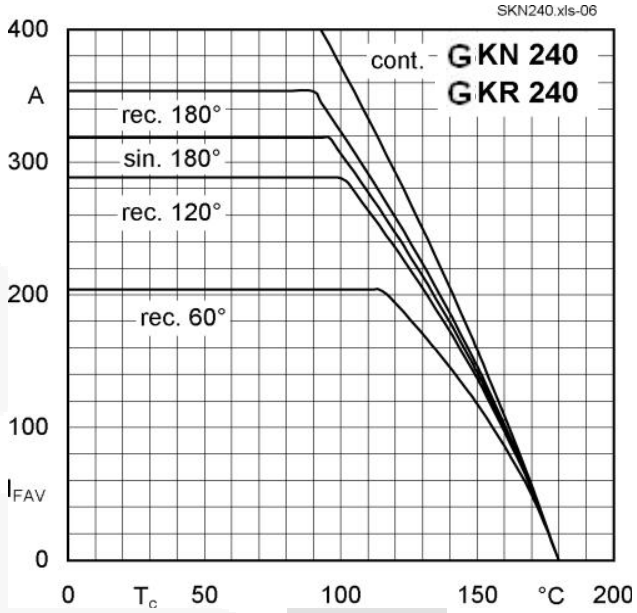


Fig 2: Forward Current vs Case Temp

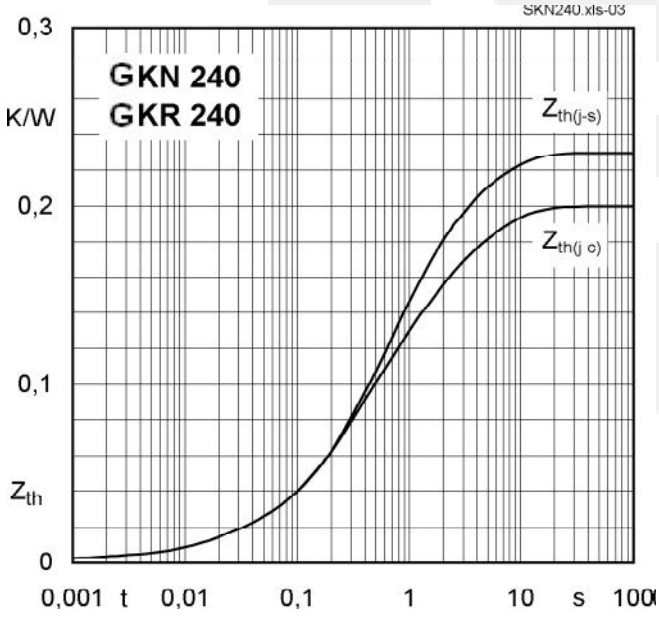


Fig 3: Transient Thermal Impedence vs Time

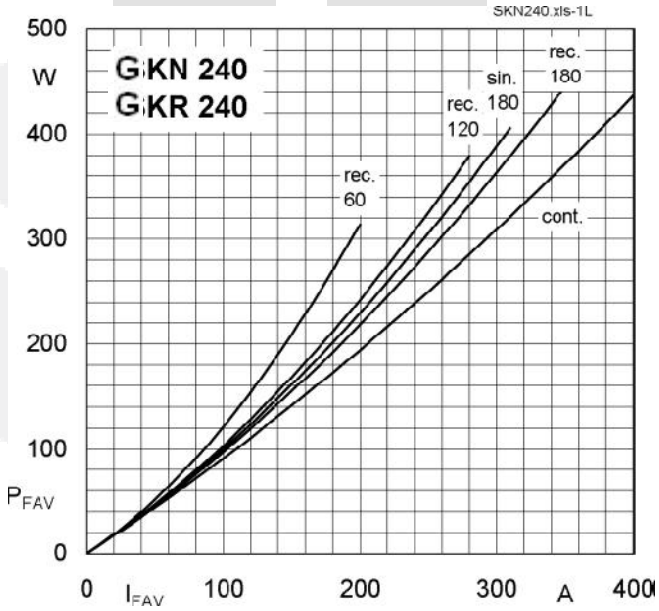
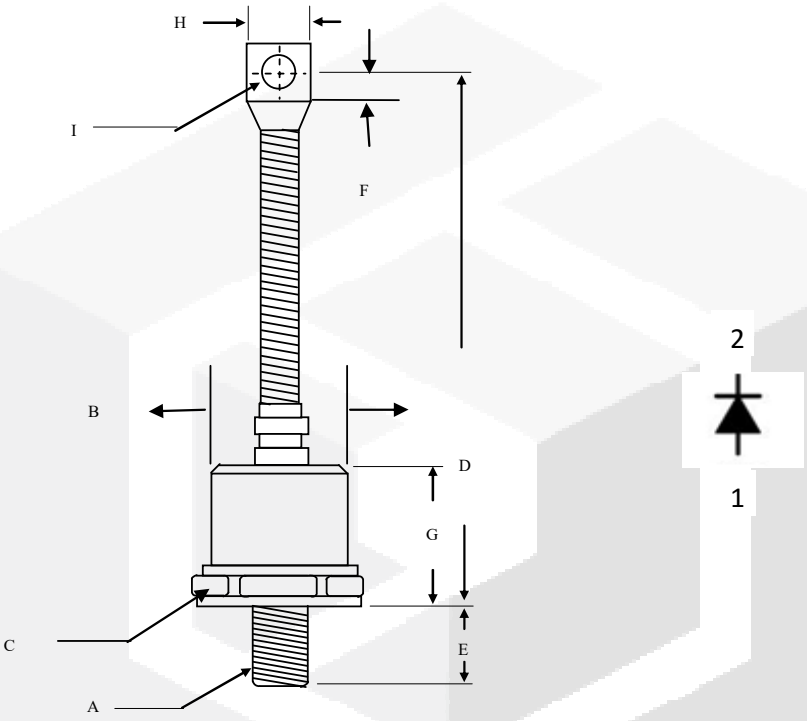


Fig 4: Power Dissipation vs Forward Current

Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

DO-9 (DO--205AB)



	Inches		Millimeters	
	Min	Max	Min	Max
A	M 20 * P 1.5			
B	-----	1.10	-----	27.94
C	1.24	1.25	31.5	31.90
D	5.31	5.98	135	152
E	0.78	0.828	19.60	21.03
F	0.470	0.530	11.94	13.46
G	-----	1.122	-----	28.5
H	-----	0.787	-----	20.0
I	0.330	0.350	8.38	8.89