Silicon Standard Recovery Diode

V_{RRM} = 400 V - 1800 V

I_F =165 A

Features

- High Surge Capability
- Types up to 1800 V V_{RRM}
- Equivalent to SKN130 Series
- Not ESD Sensitive

DO-8 Package



GKN

RoHS COMPLIANT

REACH COMPLIANCE

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

Parameter	Symbol	Conditions	GKN130/04	GKN130/08	GKN130/12	GKN130/14	GKN130/16	GKN130/18	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	165	165	165	165	165	165	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	T_C = 25 °C, t_p = 10 ms	2500	2500	2500	2500	2500	2500	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	GKN130/04	GKN130/08	GKN130/12	GKN130/14	GKN130/16	GKN130/18	Unit
Diode forward voltage	V_F	I_F = 60 A, T_j = 25 °C	1.5	1.5	1.5	1.5	1.5	1.5	V
Reverse current	I_R	$V_R = V_{RRM}$, T_j = 180 °C	22	22	22	22	22	22	mA
Thermal characteristics									
Thermal resistance, junction - case	R_{thJC}		0.35	0.35	0.35	0.35	0.35	0.35	K/W

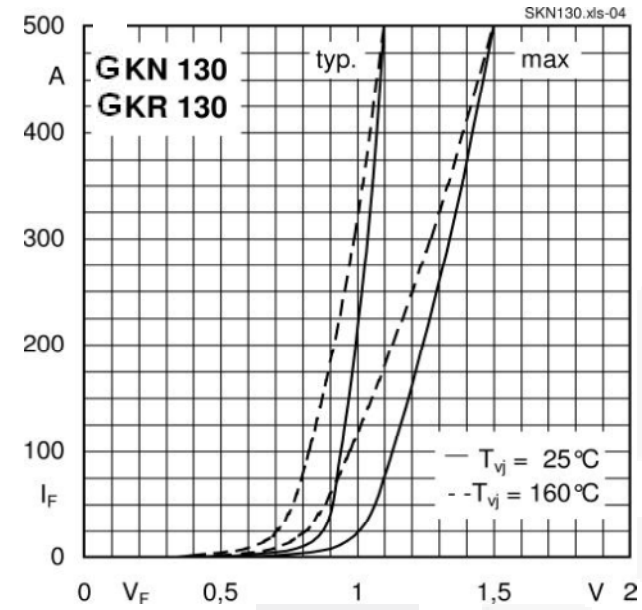


Fig 1: Forward Characteristics

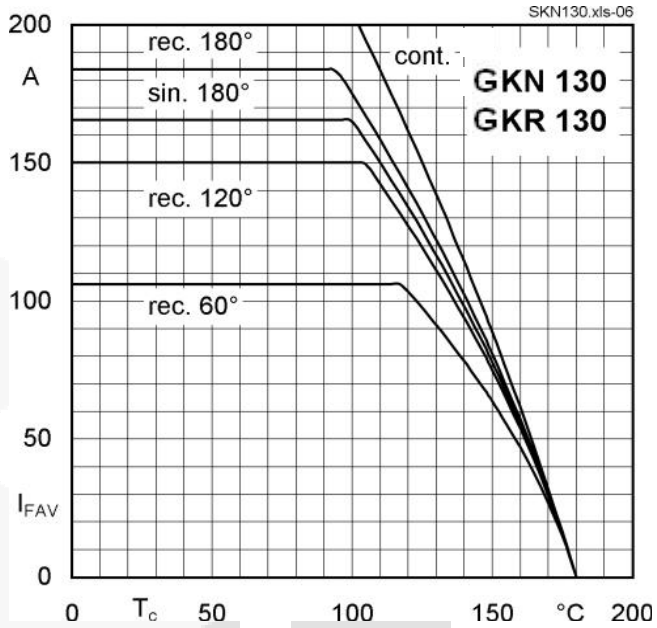


Fig 2: Forward Current vs Case Temp

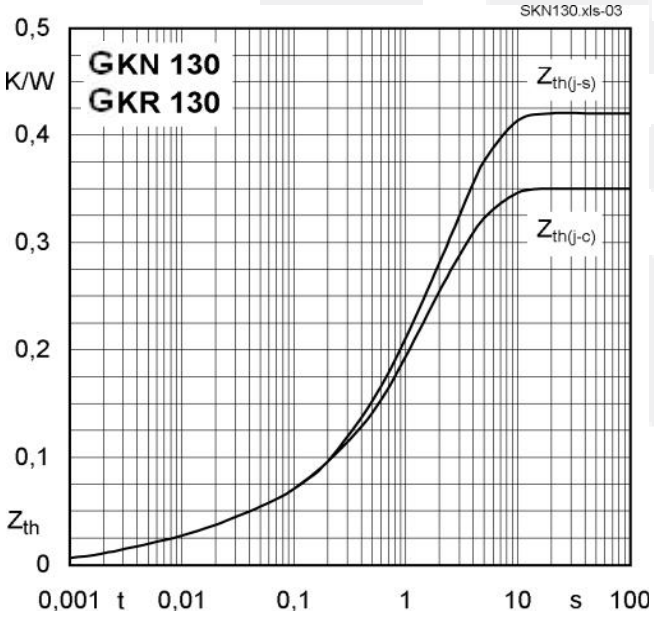


Fig 3: Transient Thermal Impedence vs Time

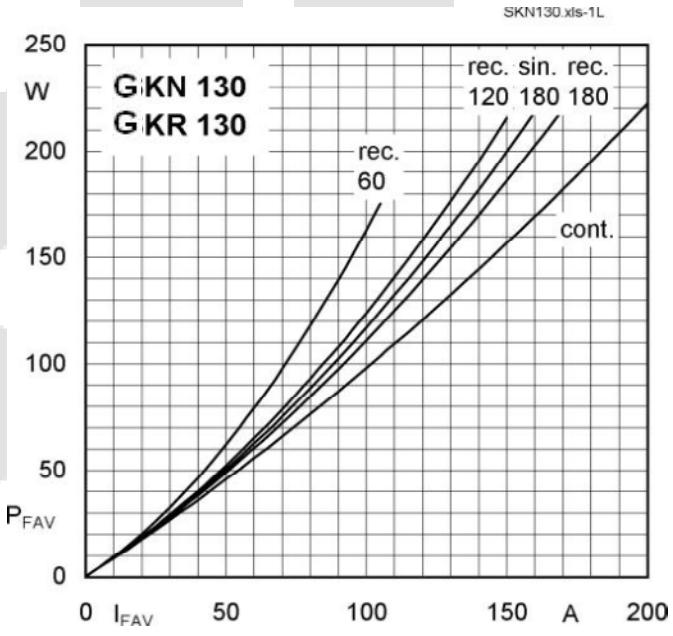
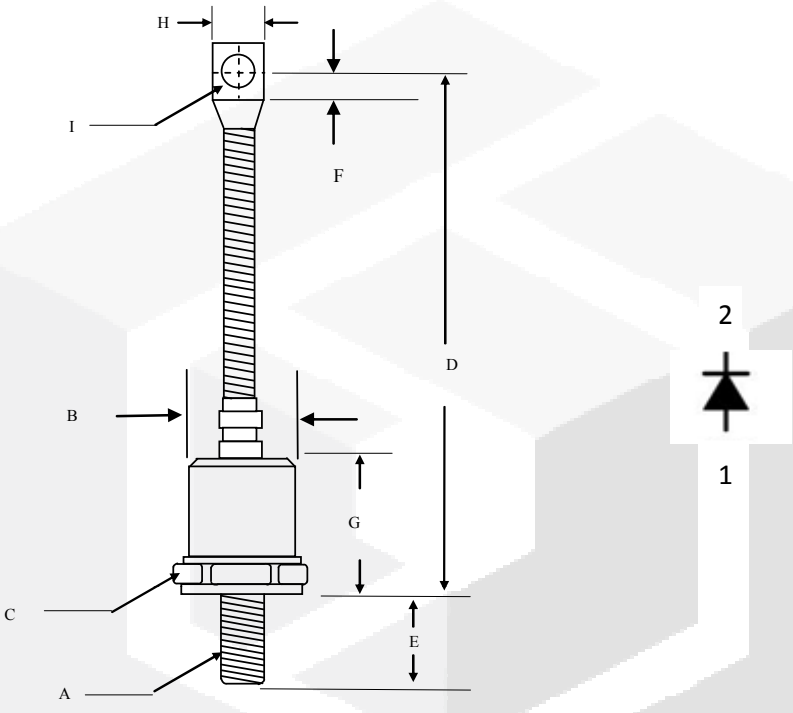


Fig 4: Power Dissipation vs Forward Current

Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

DO-8 (DO-205AA)



	Inches		Millimeters	
	Min	Max	Min	Max
A	3/8-24 UNF			
B	-----	φ0.930	-----	φ23.5
C	1.050	1.060	26.67	26.92
D	4.300	4.700	109.22	119.38
E	-----	0.690	-----	17.00
F	0.260	-----	6.50	-----
G	-----	0.940	-----	24.00
H	-----	0.600	-----	15.23
I	0.276	0.286	7.010	7.260