

Silicon Standard Recovery Diode

 $V_{RRM} = 400\text{ V} - 1600\text{ V}$
 $I_F = 95\text{ A}$

Features

- High Surge Capability
- Types up to 1600 V V_{RRM}
- Equivalent to SKR71 Series
- Not ESD Sensitive

DO-5 Package


Maximum ratings, at $T_j = 25\text{ °C}$, unless otherwise specified (GKN has leads reversed)

Parameter	Symbol	Conditions	GKR71/04	GKR71/08	GKR71/12	GKR71/14	GKR71/16	Unit
Repetitive peak reverse voltage	V_{RRM}		400	800	1200	1400	1600	V
DC blocking voltage	V_{DC}		400	800	1200	1400	1600	V
Continuous forward current	I_F	$T_C \leq 100\text{ °C}$	95	95	95	95	95	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$, $t_p = 10\text{ ms}$	1150	1150	1150	1150	1150	A
Operating temperature	T_j		-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	°C

Electrical characteristics, at $T_j = 25\text{ °C}$, unless otherwise specified

Parameter	Symbol	Conditions	GKR71/04	GKR71/08	GKR71/12	GKR71/14	GKR71/16	Unit
Diode forward voltage	V_F	$I_F = 60\text{ A}$, $T_j = 25\text{ °C}$	1.5	1.5	1.5	1.5	1.5	V
Reverse current	I_R	$V_R = V_{RRM}$, $T_j = 180\text{ °C}$	10	10	10	10	10	mA

Thermal characteristics

Parameter	Symbol	Conditions	GKR71/04	GKR71/08	GKR71/12	GKR71/14	GKR71/16	Unit
Thermal resistance, junction - case	R_{thJC}		0.55	0.55	0.55	0.55	0.55	K/W

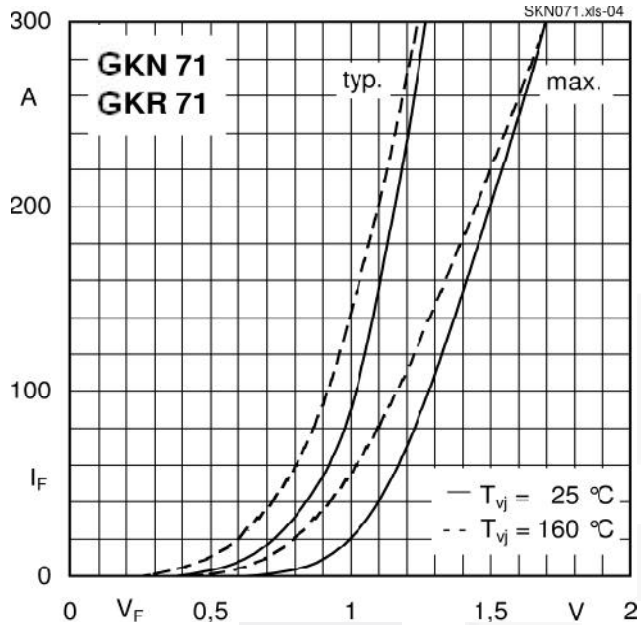


Fig 1: Forward Characteristics

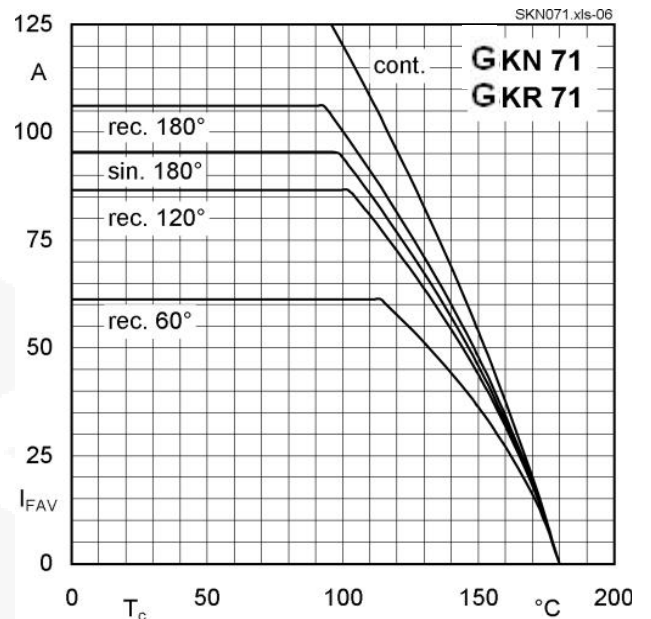


Fig 2: Forward Current vs Case Temp

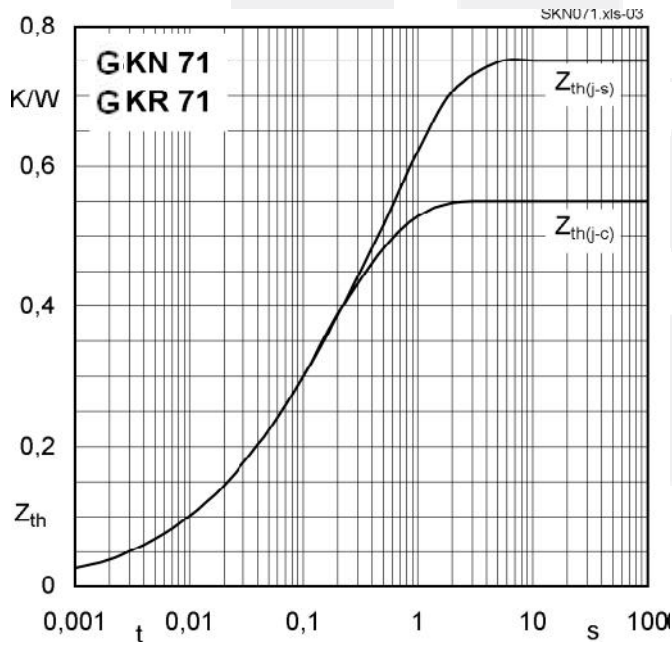


Fig 3: Transient Thermal Impedence vs Time

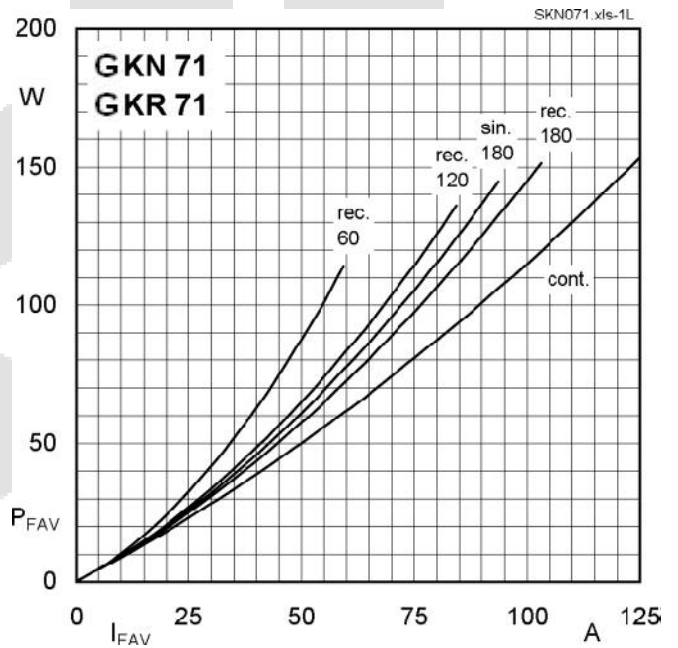
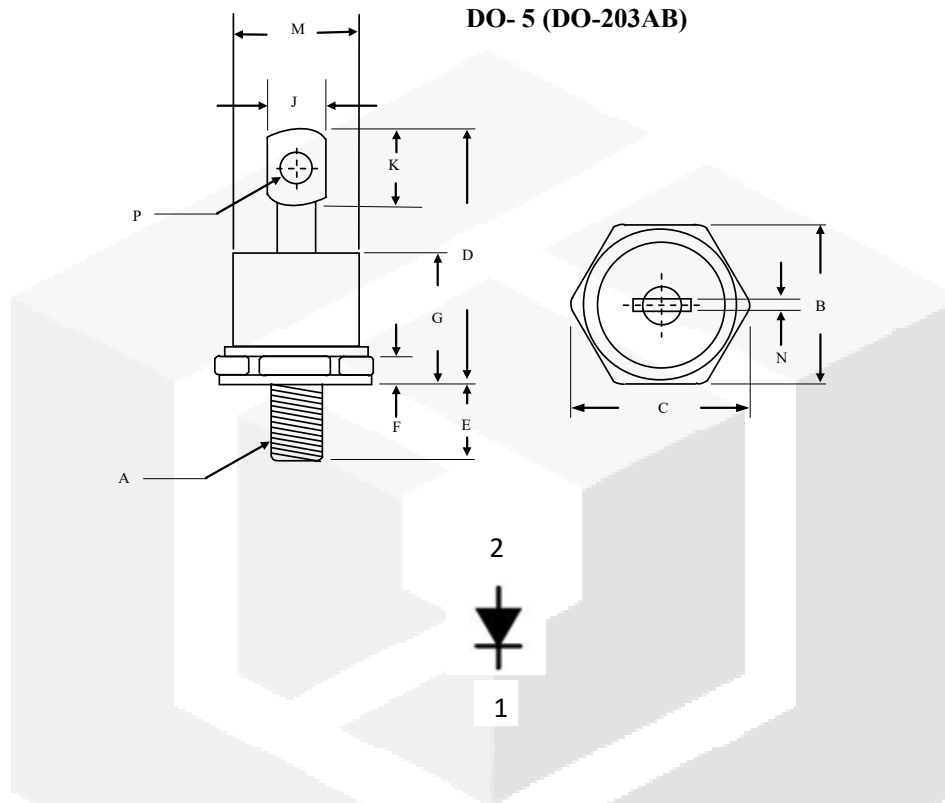


Fig 4: Power Dissipation vs Forward Current

Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



	Inches		Millimeters	
	Min	Max	Min	Max
A	1/4 -28 UNF			
B	0.669	0.687	17.19	17.44
C	-----	0.794	-----	20.16
D	-----	1.020	-----	25.91
E	0.422	0.453	10.72	11.50
F	0.115	0.200	2.93	5.08
G	-----	0.460	-----	11.68
J	-----	0.280	-----	7.00
K	0.236	-----	6.00	-----
M	-----	0.589	-----	14.96
N	-----	0.063	-----	1.60
P	0.140	0.175	3.56	4.45