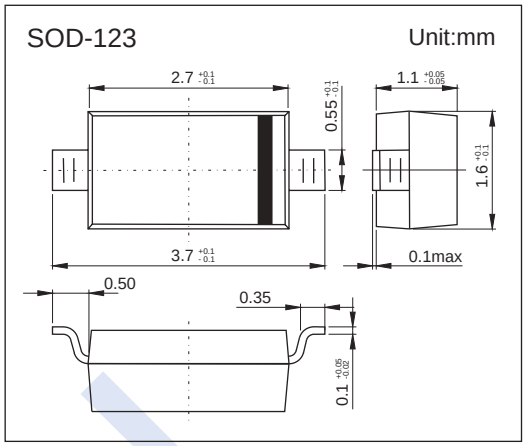
Switching Diodes
1KS3011E,1KS3013E,1KS3014E



■ Features

- ● Silicon Epitaxial Planar Diodes
- ● For General Purpose
- ● This diode is also available in other case.
- ● Small Signal Diodes

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	1KS3013E	1KS3014E	1KS3011E	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	120	200	250	V
Continuous Reverse Voltage	V_R	100	150	200	
Forward DC Current	I_F	250			mA
Averaged Forward Current	I_{FAV}	200			
Repetitive Peak Forward Current @ f>50Hz,	I_{FRM}	625			
Surge Forward Current @ t<1s	I_{FSM}	1			A
Power Dissipation	P_D	410			mW
Thermal Resistance Junction to Ambient	R_{thJA}	375			℃/W
Junction Temperature	Tj	150			℃
Storage Temperature	Tstg	-55 to 150			

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■ Electrical Characteristics Ta = 25℃

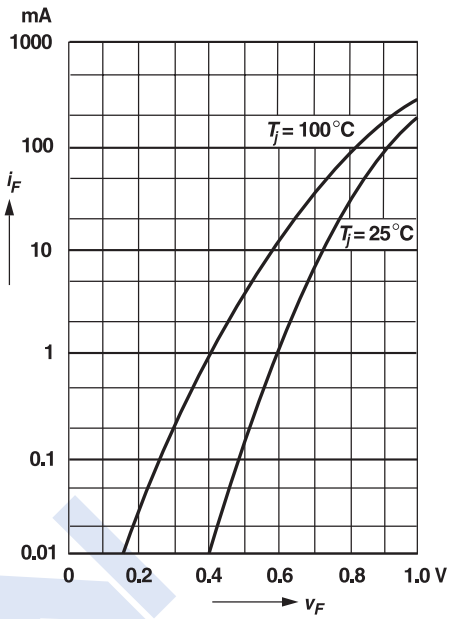
Parameter		Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	1KS3013E	$V_{(BR)}$	I_R= 1mA	120			V
	1KS3014E			200			
	1KS3011E			250			
Forward voltage		V_F	I_F= 100 mA			1	
			I_F= 200 mA			1.25	
Reverse voltage leakage current	1KS3013E	I_R	V_R=100V			100	nA
	1KS3013E		V_R=100V,T_J=100℃			15	uA
	1KS3014E		V_R=150V			100	nA
	1KS3014E		V_R=150V,T_J=100℃			15	uA
	1KS3011E		V_R=200V			100	nA
	1KS3011E		V_R=200V,T_J=100℃			15	uA
Dynamic Forward Resistance		r_f	I_F= 10 mA		5		Ω
Reverse Recovery Time		t_{rr}	I_F=I_R=30mA,Irr=3mA,R_L=100mΩ			50	ns
Diode capacitance		C_D	V_R=0V, f=1MHz		1.5		pF

■ Marking

NO.	1KS3013E	1KS3014E	1KS3011E
Marking	A8	T2	S2E

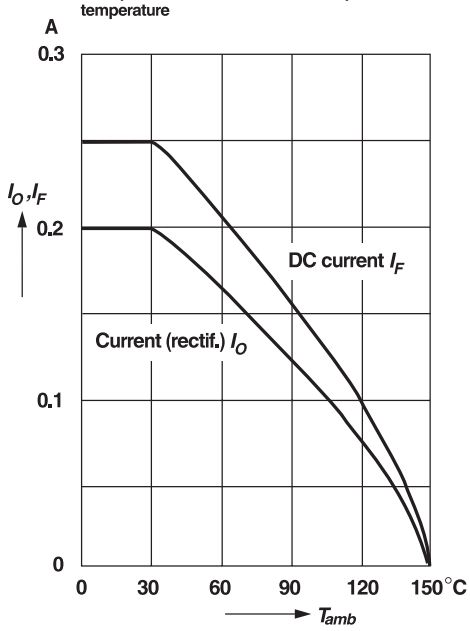
■ Typical Characterisitics

Forward characteristics



Admissible forward current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

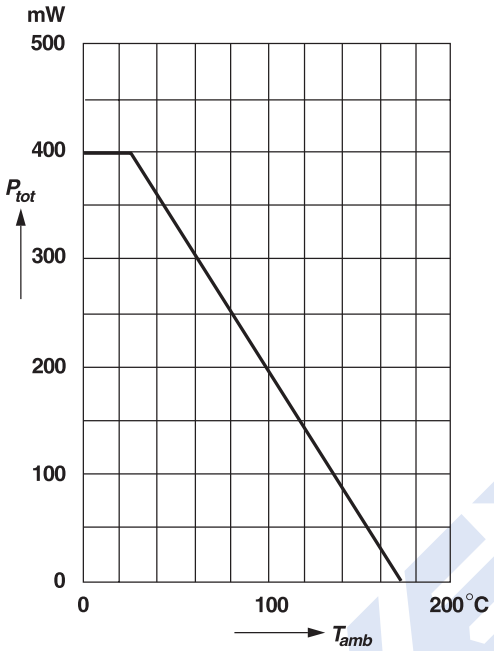


Switching Diodes
1KS3011E,1KS3013E,1KS3014E

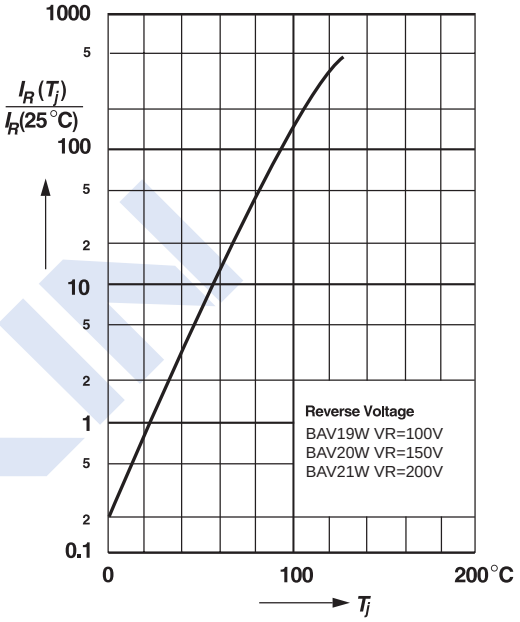
■ Typical Characterisitics

Admissible power dissipation versus ambient temperature

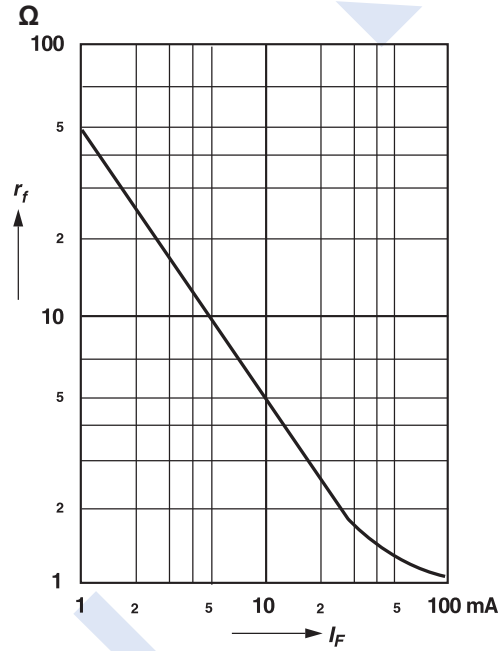
Valid provided that electrodes are kept at ambient temperature



Leakage current versus junction temperature



Dynamic forward resistance versus forward current



Capacitance versus reverse voltage