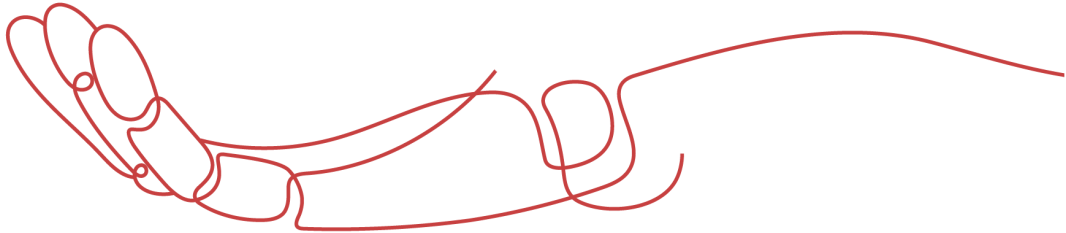




PRODUCT DATA SHEET



To learn more about JGSEMI, please visit our website at



Datasheet



Resources

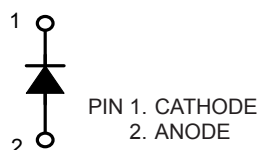


Samples

Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

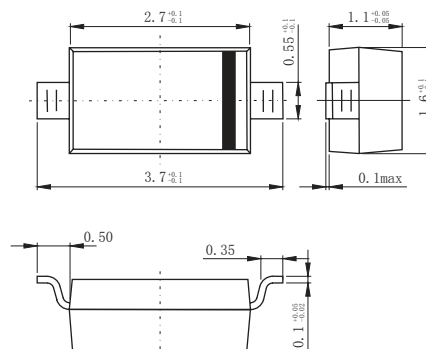
■ Features

- Forward Voltage : $V_F=0.365V$ (TYP.)
- Forward Current : $I_F(AV)=1A$
- Repetitive Peak Reverse Voltage : $V_{RM}=40V$



SOD-123

Unit: mm



■ Absolute Maximum Ratings $T_a = 25^\circ C$

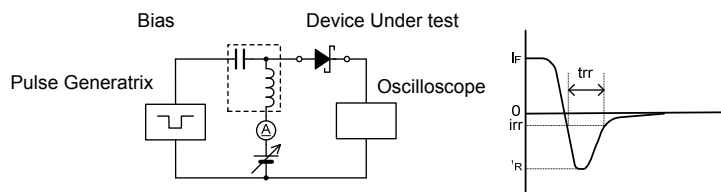
Parameter	Symbol	Rating	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	40	V
DC Blocking Voltage	V_R	30	
DC Forward Current	$I_F(AV)$	1	A
Peak forward surge current (Note.1)	I_{FSM}	20	
Junction Temperature	T_J	125	$^\circ C$
Storage temperature range	T_{stg}	-55 to 150	

Note.1: Non continuous high amplitude 60Hz half-sine wave.

■ Electrical Characteristics $T_a = 25^\circ C$

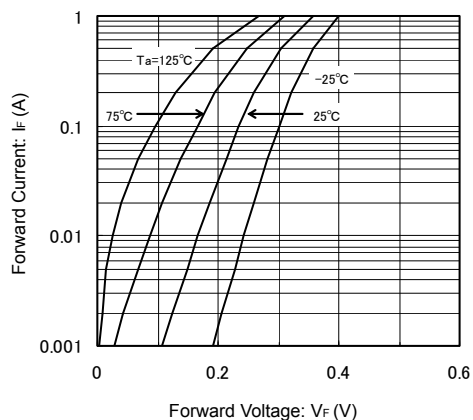
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_{RM}	$I_R = 100 \mu A$	30			V
Forward voltage	V_F	$I_F = 100m A$		230	315	mV
		$I_F = 500mA$		300	385	
		$I_F = 1 A$		365	410	
Reverse voltage leakage current	I_R	$V_R = 40 V$		0.25	2	mA
Junction capacitance	C_j	$V_R = 1V, f = 1 MHz$		150		pF
Reverse Recovery Time (Note.2)	t_{rr}	$I_F = I_R = 10mA, i_{rr} = 1mA$		41		ns

Note.2: t_{rr} measurement circuit.

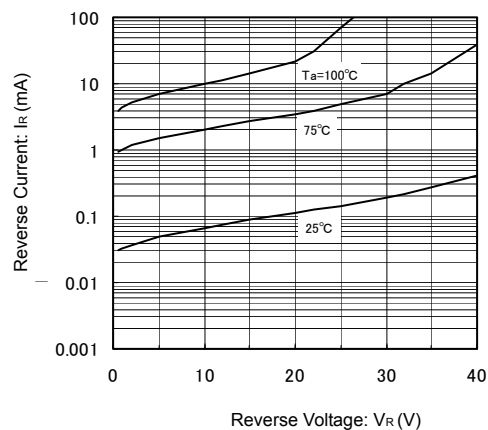


■ Typical Characteristics

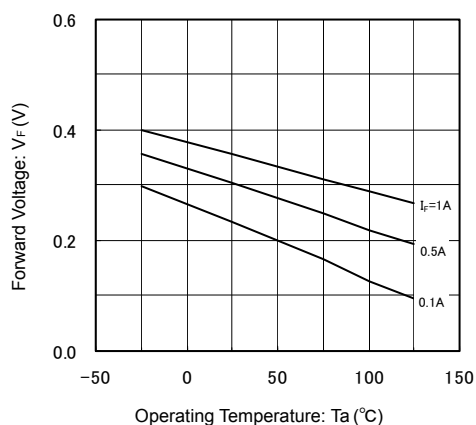
(1) Forward Current vs. Forward Voltage



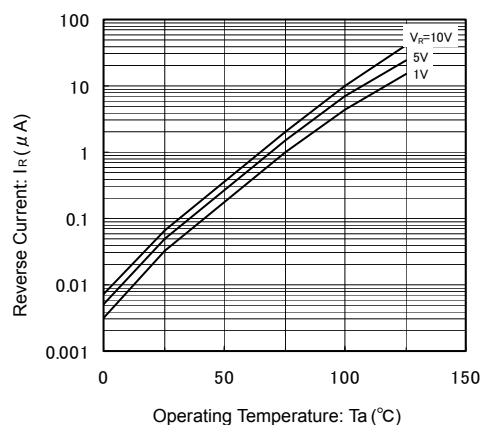
(2) Reverse Current vs. Reverse Voltage



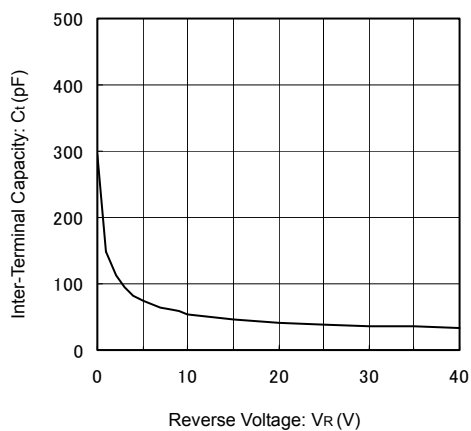
(3) Forward Voltage vs. Operating Temperature



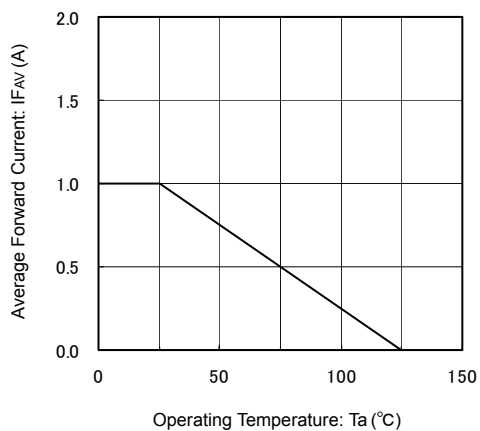
(4) Reverse Current vs. Operating Temperature



(5) Inter-Terminal Capacity vs. Reverse Voltage



(6) Average Forward Current vs. Operating Temperature



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