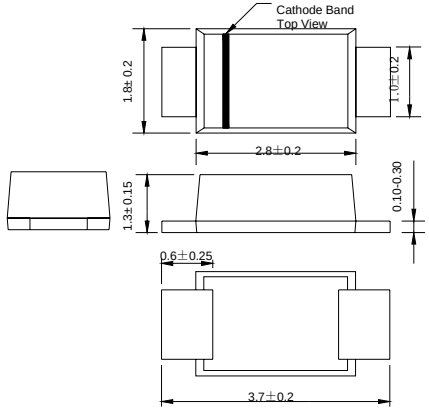
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

RS07K

SURFACE MOUNT FAST RECOVERY RECTIFIER

Reverse Voltage - 800 Volts Forward Current - 0.7 Ampere

SOD-123FL



Dimensions in millimeters

FEATURES

- Glass passivated device
- Ideal for surface mouted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed: 250°C/10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC SOD-123FL molded plastic body over passivated chip
Terminals: Solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.0007 ounce, 0.02 grams

MARKING DIAGRAM

A = D/C coding
– = Even Year (Without standing for odd year)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	RS07K	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	800	VOLTS
Maximum RMS voltage	V_{RMS}	560	VOLTS
Maximum DC blocking voltage	V_{DC}	800	VOLTS
Maximum average forward rectified current at T_A=65℃ (NOTE 1)	$I_{(AV)}$	0.7	Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T_L=25°C	I_{FSM}	25.0	Amps
Maximum instantaneous forward voltage at 0.7A	V_F	1.15	Volts
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=125℃	I_R	10.0 50.0	μA
Maximum reverse recovery time (NOTE 2)	trr	500	ns
Typical junction capacitance (NOTE 3)	C_J	4	pF
Typical thermal resistance (NOTE 4)	$R_{\theta JA}$	180	K/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150	°C

Note: 1.Averaged over any 20ms period.
2.Measured with IF=0.5A, IR=1A, Irr=0.25A.
3.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
4.Thermal resistance junction to ambient, 6.0 mm2 coppeer pads to each terminal.

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

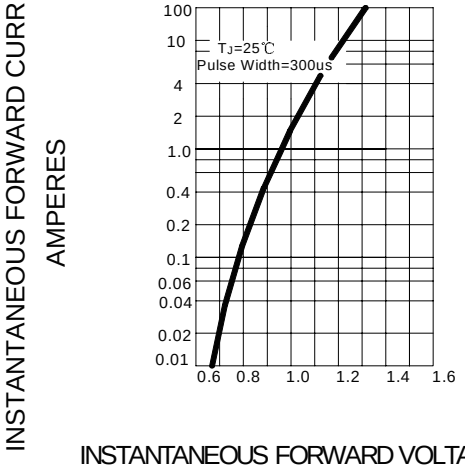


FIG.2 – TYPICAL JUNCTION CAPACITANCE

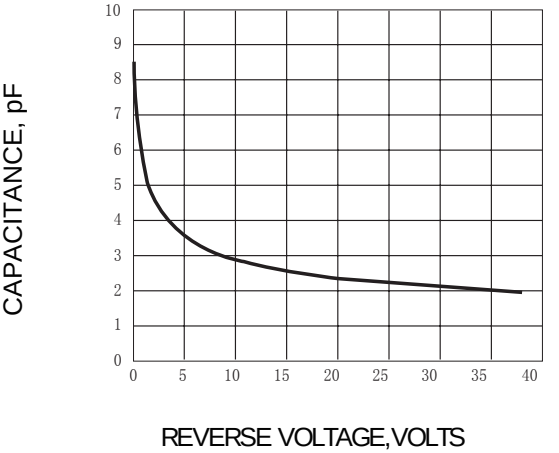


FIG.3 -- TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

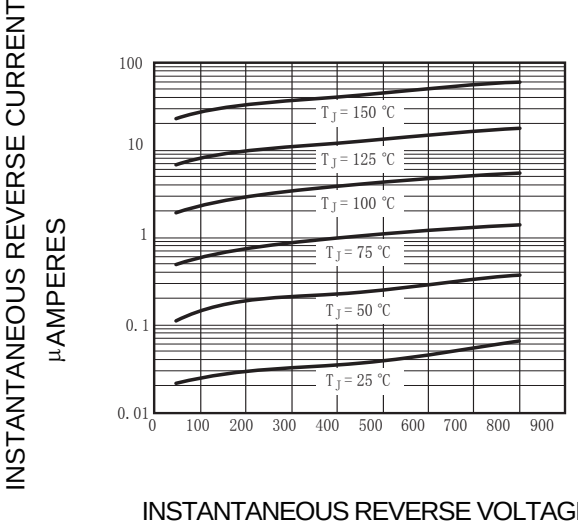
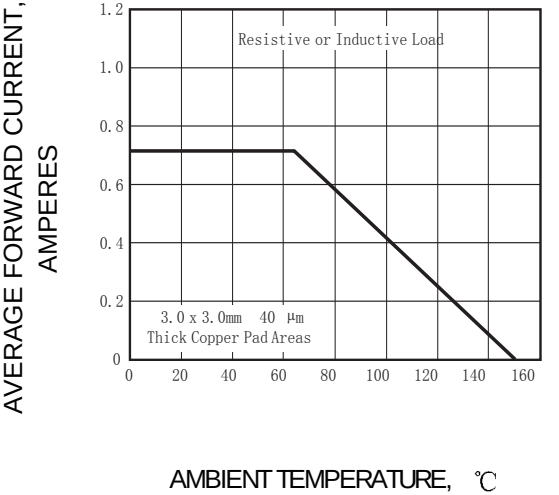


FIG.4 – FORWARD DERATING CURVE



Periodic Table

1	2	3	4	5	6	7	8	9	10	11	12	13
A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**
14	15	16	17	18	19	20	21	22	23	24	25	26
N	**O**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
27	28	29	30	31	32	33	34	35	36	37	38	39
A.	**B.**	**C.**	**D.**	**E.**	**F.**	**G.**	**H.**	**I.**	**J.**	**K.**	**L.**	**M.**
40	41	42	43	44	45	46	47	48	49	50	51	52
N.	**O.**	**P.**	**Q.**	**R.**	**S.**	**T.**	**U.**	**V.**	**W.**	**X.**	**Y.**	**Z.**

Notice:

1, Numbers indicate the cycle
2, Letters indicate the cycle code
3, The “-” above the letters indicate the even years,if there is not“-” above the letters indicate odd years.
4, The 1st - 26th weeks use A~Z indicate, the 27th -52th weeks use A.~Z. indicate.