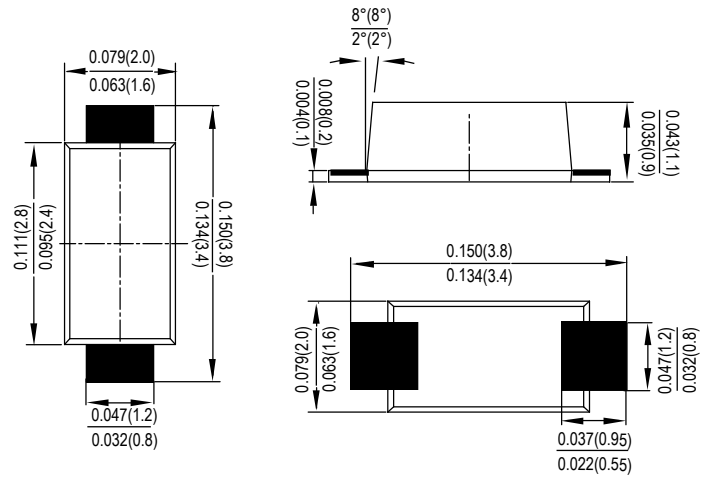


FEATURES

- For surface mounted applications in order to optimize board space.
- Glass passivated junction
- Excellent clamping capability
- Low inductance
- Flammability Classification 94V-0
- High temperature soldering : 260°C / 10 seconds at terminals
- Green molding compound as per IEC61249 Std. . (Halogen Free)

SOD-123FL



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case : Molded plastic
- Polarity : Indicated by cathode band

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

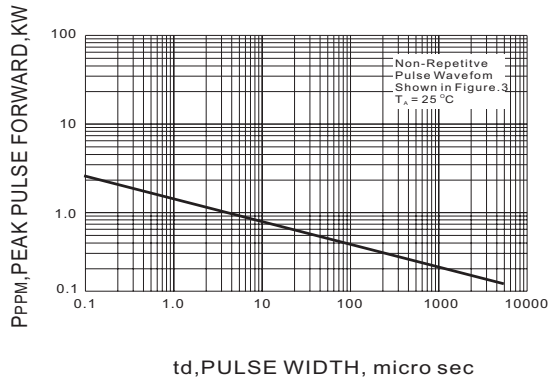
Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.
 For Capacitive load derate current by 20%.

RATING	SYMBOL	VALUE	UNITS
Peak Power Dissipation on 10/1000us waveform (Note 1.2 , Fig.1)	P _{pp}	200	Watts
Peak Forward Surge Current, 8.3ms single half sine - wave superimposed on rated load For (JEDEC method) (Notes 2,3)	I _{FSM}	20	Amps
Peak Pulse Current on 10/1000s waveform (Note 1 , Fig.3)	I _{PP}	See Table 1	Amps
Operating and Storage Temperature Range	T _J , T _{STG}	-55 ~ +150	°C

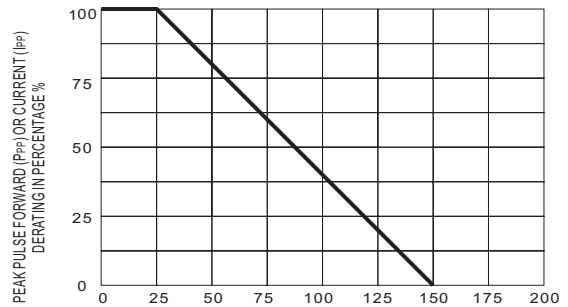
NOTES:

1. Non-repetitive current pulse, per Fig.3 and derated above TA = 25°C per Fig.2.
2. Mounted on 5.0 mm² (0.13mm thick) land areas.
3. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

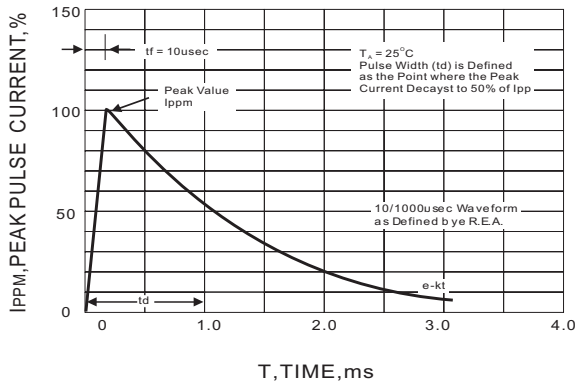
Part Number	V _{RWM}	V _{BR} @ I _T			I _R @ V _{RWM}	V _C @ I _{PP}		Marking Code
		Min.	Max.	I _T		V	A	
	V	V	V	mA	uA			
P2SMSJ5.0A	5.0	6.40	7.00	10	200	9.2	21.7	HE
P2SMSJ6.0A	6.0	6.70	7.40	10	200	10.3	19.4	HG
P2SMSJ6.5A	6.5	7.20	8.00	10	250	11.2	17.9	HK
P2SMSJ7.0A	7.0	7.80	8.60	10	100	12.0	16.7	HM
P2SMSJ7.5A	7.5	8.30	9.20	1.0	50	12.9	15.5	HP
P2SMSJ8.0A	8.0	8.90	9.80	1.0	25	13.6	14.7	HR
P2SMSJ8.5A	8.5	9.40	10.40	1.0	10	14.4	13.9	HT
P2SMSJ9.0A	9.0	10.00	11.10	1.0	5	15.4	13.0	HV
P2SMSJ10A	10.0	11.10	12.30	1.0	2.5	17.0	11.8	HX
P2SMSJ11A	11.0	12.20	13.50	1.0	2.5	18.2	11.0	HZ
P2SMSJ12A	12.0	13.30	14.70	1.0	2.5	19.9	10.1	IE
P2SMSJ13A	13.0	14.40	15.90	1.0	1	21.5	9.3	IG
P2SMSJ14A	14.0	15.60	17.20	1.0	1	23.2	8.6	IK
P2SMSJ15A	15.0	16.70	18.50	1.0	1	24.4	8.2	IM
P2SMSJ16A	16.0	17.80	19.70	1.0	1	26.0	7.7	IP
P2SMSJ17A	17.0	18.90	20.90	1.0	1	27.6	7.2	IR
P2SMSJ18A	18.0	20.00	22.10	1.0	1	29.2	6.8	IT
P2SMSJ20A	20.0	22.20	24.50	1.0	1	32.4	6.2	IV
P2SMSJ22A	22.0	24.40	26.90	1.0	1	35.5	5.6	IX
P2SMSJ24A	24.0	26.70	29.50	1.0	1	38.9	5.1	IZ
P2SMSJ26A	26.0	28.90	31.90	1.0	1	42.1	4.8	JE
P2SMSJ28A	28.0	31.10	34.40	1.0	1	45.4	4.4	JG
P2SMSJ30A	30.0	33.30	36.80	1.0	1	48.4	4.1	JK
P2SMSJ33A	33.0	36.70	40.60	1.0	1	53.3	3.8	JM
P2SMSJ36A	36.0	40.00	44.20	1.0	1	58.1	3.4	JP
P2SMSJ40A	40.0	44.40	49.10	1.0	1	64.5	3.1	JR
P2SMSJ43A	43.0	47.80	52.80	1.0	1	69.4	2.9	JT
P2SMSJ45A	45.0	50.00	55.30	1.0	1	72.7	2.8	JV
P2SMSJ48A	48.0	53.30	58.90	1.0	1	77.4	2.6	JX
P2SMSJ51A	51.0	56.70	62.70	1.0	1	82.4	2.4	JZ
P2SMSJ54A	54.0	60.00	66.30	1.0	1	87.1	2.3	RE
P2SMSJ58A	58.0	64.40	71.20	1.0	1	93.6	2.1	RG
P2SMSJ60A	60.0	66.70	73.70	1.0	1	96.8	1.8	RK
P2SMSJ64A	64.0	71.10	78.60	1.0	1	103.0	1.7	RM
P2SMSJ70A	70.0	77.80	86.00	1.0	1	113.0	1.5	RP
P2SMSJ75A	75.0	83.30	92.10	1.0	1	121.0	1.4	RR
P2SMSJ78A	78.0	86.70	95.80	1.0	1	126.0	1.4	RT
P2SMSJ85A	85.0	94.40	104.00	1.0	1	137.0	1.3	RV
P2SMSJ90A	90.0	100.00	111.00	1.0	1	146.0	1.2	RX
P2SMSJ100A	100.0	111.00	123.00	1.0	1	162.0	1.1	RZ
P2SMSJ110A	110.0	122.00	135.00	1.0	1	177.0	1.0	SE
P2SMSJ120A	120.0	133.00	147.00	1.0	1	193.0	0.9	SG
P2SMSJ130A	130.0	144.00	159.00	1.0	1	209.0	0.8	SK
P2SMSJ150A	150.0	167.00	185.00	1.0	1	243.0	0.7	SM
P2SMSJ160A	160.0	178.00	197.00	1.0	1	259.0	0.7	SP
P2SMSJ170A	170.0	189.00	209.00	1.0	1	275.0	0.6	SR



td,PULSE WIDTH, micro sec
Fig.1 PEAK PULSE POWER RATING CURVE



TA, AMBIENT TEMPERATURE, °C
Fig.2 DERATING CURVE



T, TIME, ms
Fig.3 PULSE WAVE FORM

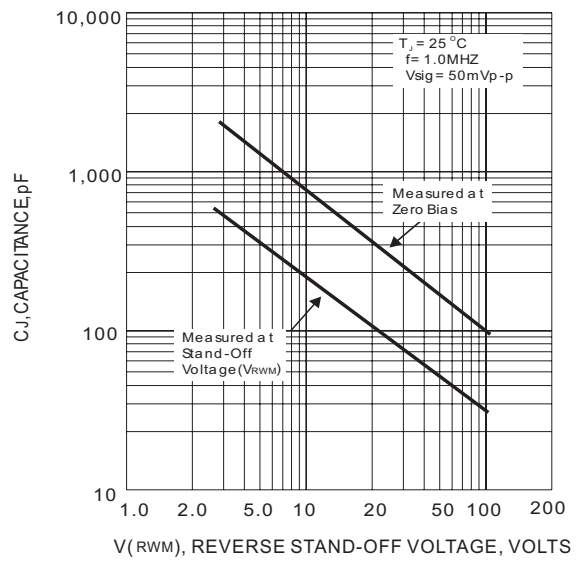


Fig.4 TYPICAL CAPACITANCE

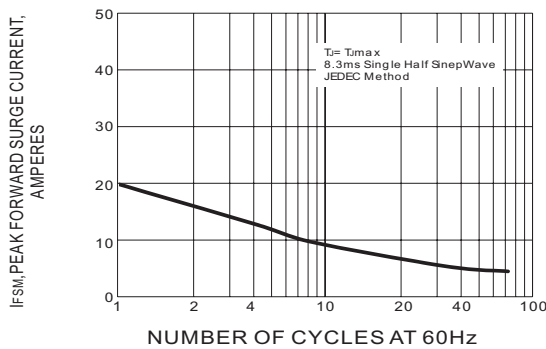
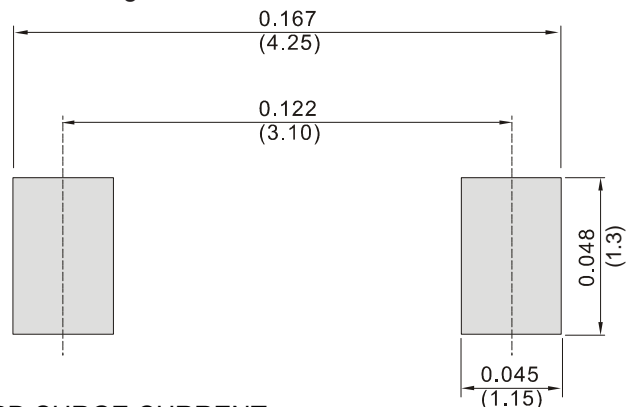


Fig.5 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from DIYI.
- DIYI reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- DIYI disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- DIYI does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.
DIYI makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify DIYI for any damages resulting from such improper use or sale.
- Since DIYI uses lot number as the tracking base, please provide the lot number for tracking when complaining.