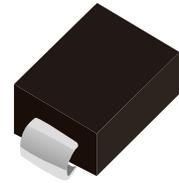
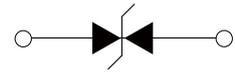


FEATURES

- | Excellent clamping capability
- | Low profile package and low inductance
- | High peak pulse voltage capability at 1.2/50µs-8/20µs@2Ω waveform
- | Fast response time: typically less than 1.0ps from 0V to VBR min
- | For surface mounted applications in order to optimize board space
- | IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact)



DO-214AA(SMB)



Schematic Symbol

APPLICATIONS

- | Power supply protection
- | Automotive application
- | Industrial application
- | Power management

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS (T_A=25°C)

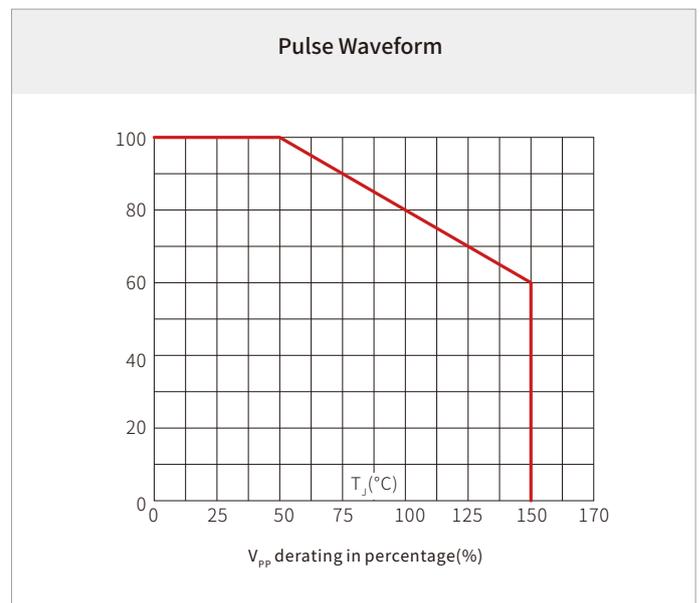
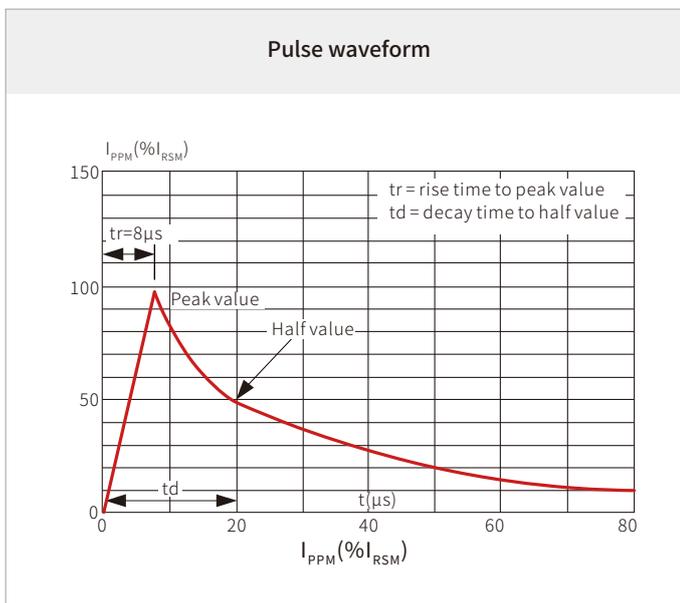
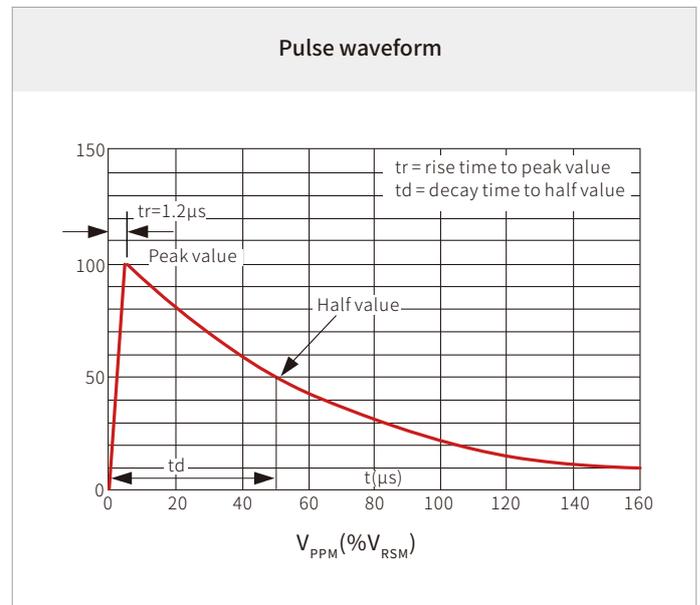
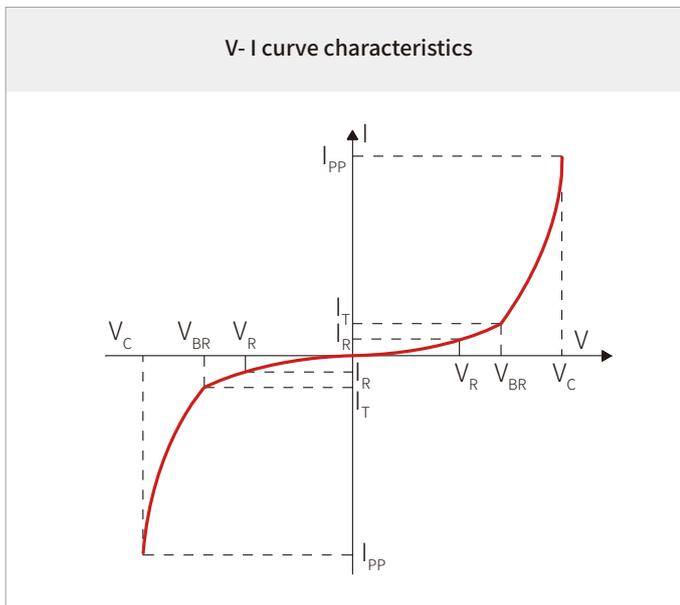
Parameter	Symbol	Value	Unit
Operating Junction Temperature	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C
Steady state power dissipation at T _L =75°C	P _{M(AV)}	6.5	W
Peak pulse voltage at 1.2/50µs-8/20µs@2Ω waveform	V _{PP}	2000	V

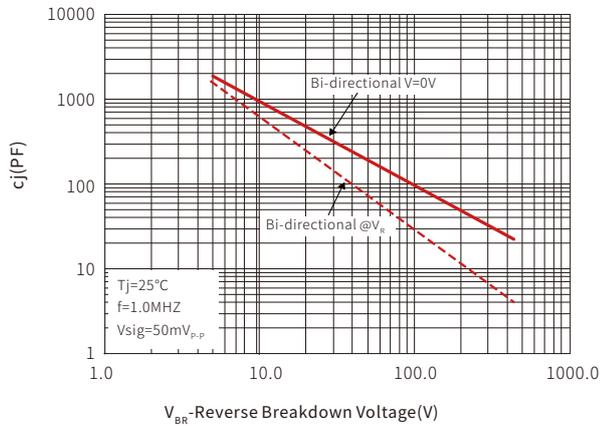
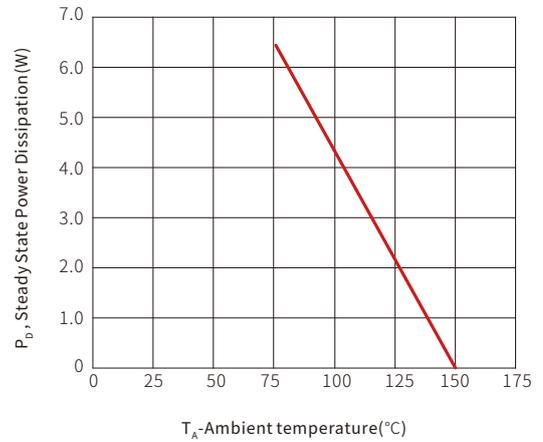
ELECTRICAL CHARACTERISTICS (T_A=25°C)

Part Number	Device Marking Code	V _{RWM}	V _{BR} @I _T	I _R @V _R		I _T	V _H	V _C @V _{PP} ^①	V _{PP} ^①
		V	Min(V)	Max(V)	Max(μA)	mA	Typ(V)	Max(V)	V
SM1KJ15CA	1K15CF	15	16.7	18.5	1	1	NA	32	2000

① Surge waveform: 1.2/50μs-8/20μs@2Ω

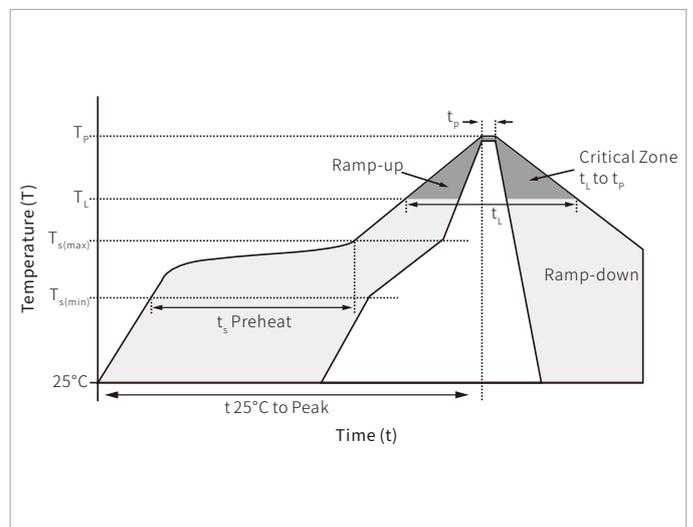
CHARACTERISTIC CURVES



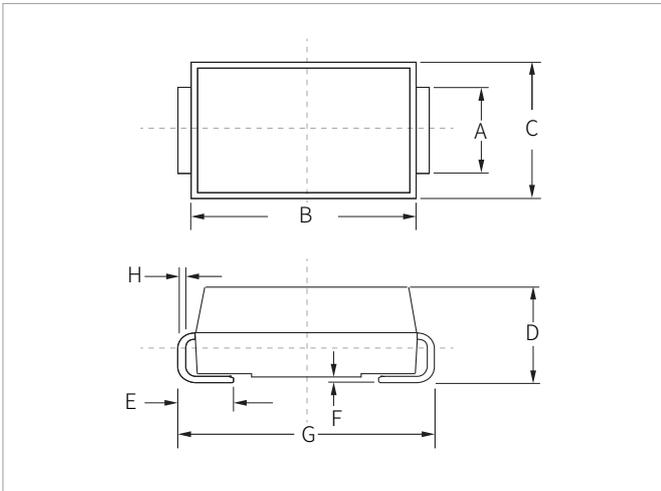
Typical Junction Capacitance

Steady State Power Dissipation Derating Curve


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_r)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

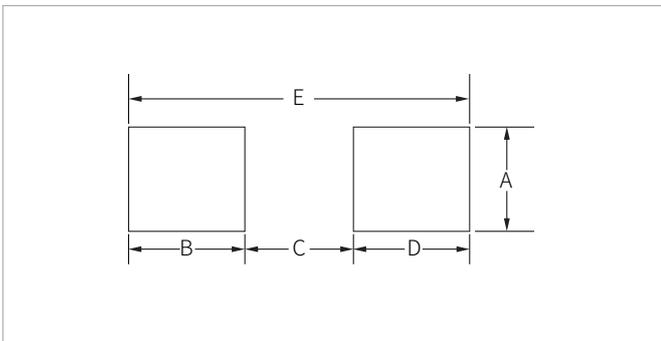


DO-214AA(SMB) PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.80	2.20	0.071	0.087
B	4.30	4.70	0.170	0.185
C	3.40	3.90	0.134	0.153
D	2.15	2.75	0.085	0.108
E	1.00	1.50	0.039	0.059
F	0.02	0.20	0.001	0.008
G	5.10	5.50	0.200	0.216
H	0.15	0.30	0.006	0.012

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.20	-	0.087	-
B	1.45	-	0.057	-
C	-	2.55	-	0.010
D	1.45	-	0.057	-
E	5.60REF		0.220REF	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SMB1KJ15CA	DO-214AA(SMB)	3000PCS	13"

Headquarters

No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

Hotline

400-021-5756

Web

<https://www.semiware.com>

Sales Center

Tel: 86-21-3463-7458
Email: sales18@semiware.com

Customer Service

Tel: 86-21-5484-1001
Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654
Email: fae01@semiware.com

Complaint & Suggestions

Tel: 86-21-3463-7172
Ext: 8868
Email: cs03@semiware.com

By QR Code

Website



Wechat

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