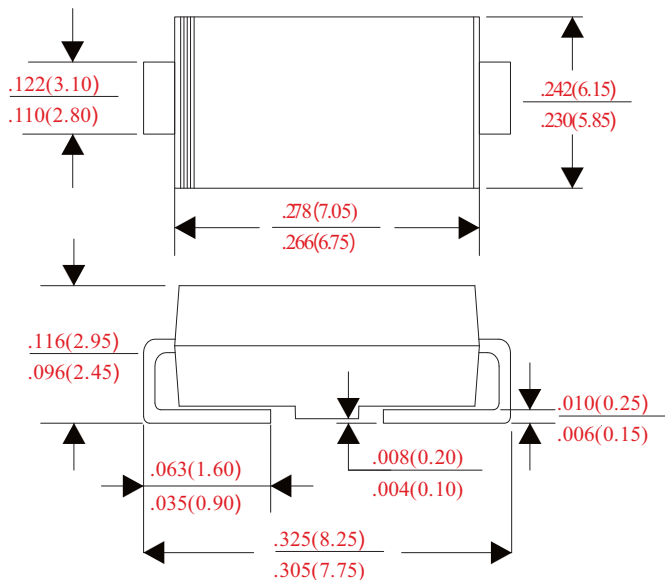


OUTLINE

SMC (DO-214AB)



Dimensions in inches and (millimeters)

FEATURES

- Glass passivated junction.
- Low incremental surge resistance
- Excellent clamping capability
- High Temperature soldering guaranteed: 265°C/ 10sec
- Plastic package has underwriters laboratory flammability 94V-0

MECHANICAL DATA

- Case: SMC (DO-214AB) Molded Plastic
- Terminals: Solder Plated
- Polarity: Indicated by cathode band
- Mounting position: Any
- Weight: 0.0134 ounce, 0.38 gram

Applications

- Power system
- Audio and video
- ABS powers
- Bluetooth
- Car

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Single, half wave, 60Hzm resistive or inductive load.
For capacitive load, derate current by 20%

Parameter	Symbols	Value	Units
Peak Power Dissipation at T _A =25°C, TP=1ms(NOTE 1,2)	P _{PK}	1500	Watts
Peak Forward Surge Current at 8.3ms Single Half Sine-Wave superimposed on rated load (JEDEC method) (NOTE 2,3)	I _{FSM}	200	Amp
Operating Junction Temperature Range	T _J	-55 ~ +150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

NOTE :

- 1.Non-repetitive current pulse, per Fig. 3 and derated above TA=25°Cper Fig. 2.
- 2.Mounted on 5.0mm² (.013mm thick) land areas.
- 3.Measured on 8.3ms , single half sine-wave or equivalent square wave , duty cycle= 4 pulses per minutes maximum.

Fig.1 PEAK PULSE POWER RATIN

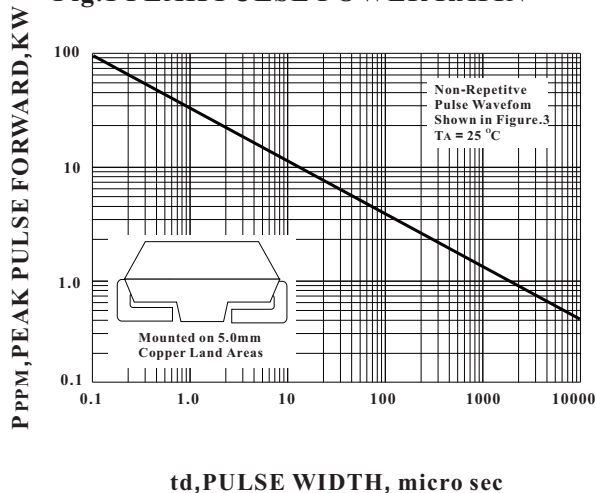


Fig.2 DERATING CURVE

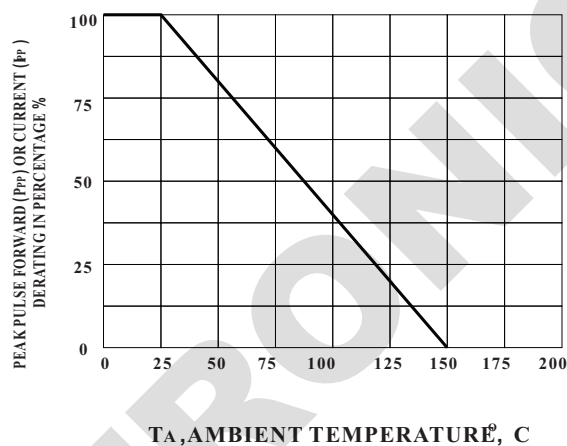


Fig.3 PULSE WAVEFORM

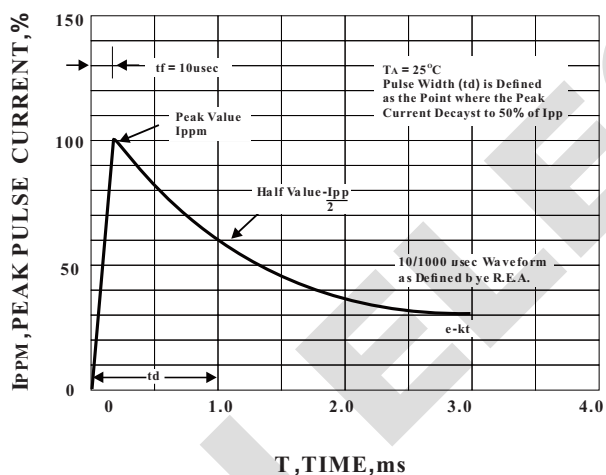


Fig.4 TYPICAL CAPACITANCE

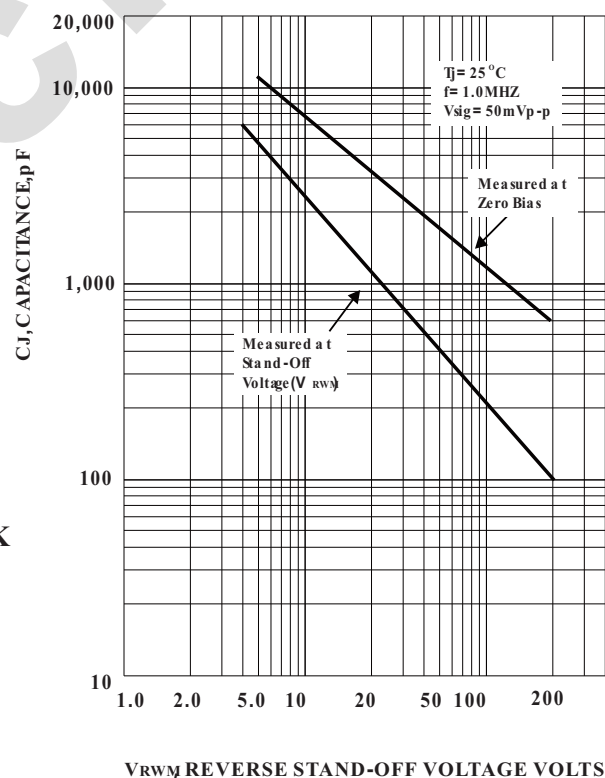
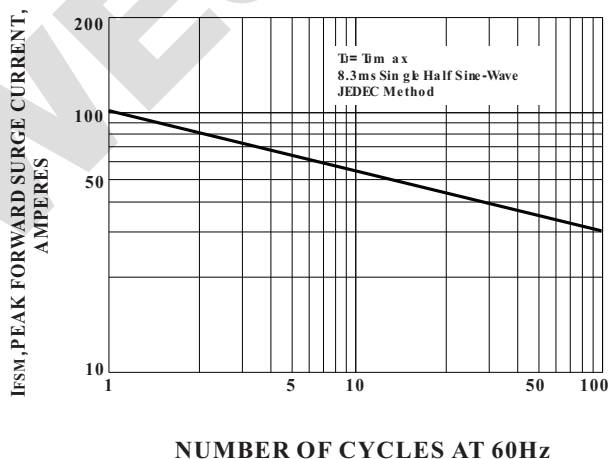


Fig.5 MAXIMUM NON-REPETITIVE PEAK



Part number (uni)	Part number (bi)	VRWM (V)	VBR@IT (V)		IT (mA)	IR@ VRWM (μA)	VC @IPP(V)	IPP (A)	Marking Code	
			Min	Max					uni	bi
SMCJ5.0A	SMCJ5.0CA	5.0	6.40	7.00	10	500	9.2	163.0	C5.0A	C5.0C
SMCJ6.0A	SMCJ6.0CA	6.0	6.67	7.37	10	500	10.3	145.7	C6.0A	C6.0C
SMCJ6.5A	SMCJ6.5CA	6.5	7.22	7.98	10	300	11.2	134.0	C6.5A	C6.5C
SMCJ7.0A	SMCJ7.0CA	7.0	7.78	8.60	10	200	12.0	125.0	C7.0A	C7.0C
SMCJ7.5A	SMCJ7.5CA	7.5	8.33	9.21	1	100	12.9	116.3	C7.5A	C7.5C
SMCJ8.0A	SMCJ8.0CA	8.0	8.89	9.83	1	50	13.6	110.3	C8.0A	C8.0C
SMCJ8.5A	SMCJ8.5CA	8.5	9.44	10.40	1	20	14.4	104.2	C8.5A	C8.5C
SMCJ9.0A	SMCJ9.0CA	9.0	10.00	11.10	1	10	15.4	97.4	C9.0A	C9.0C
SMCJ10A	SMCJ10CA	10.0	11.10	12.30	1	1	17.0	88.3	C10A	C10C
SMCJ11A	SMCJ11CA	11.0	12.20	13.50	1	1	18.2	82.5	C11A	C11C
SMCJ12A	SMCJ12CA	12.0	13.30	14.70	1	1	19.9	75.4	C12A	C12C
SMCJ13A	SMCJ13CA	13.0	14.40	15.90	1	1	21.5	69.8	C13A	C13C
SMCJ14A	SMCJ14CA	14.0	15.60	17.20	1	1	23.2	64.7	C14A	C14C
SMCJ15A	SMCJ15CA	15.0	16.70	18.50	1	1	24.4	61.5	C15A	C15C
SMCJ16A	SMCJ16CA	16.0	17.80	19.70	1	1	26.0	57.7	C16A	C16C
SMCJ17A	SMCJ17CA	17.0	18.90	20.90	1	1	27.6	54.4	C17A	C17C
SMCJ18A	SMCJ18CA	18.0	20.00	22.10	1	1	29.2	51.4	C18A	C18C
SMCJ20A	SMCJ20CA	20.0	22.20	24.50	1	1	32.4	46.3	C20A	C20C
SMCJ22A	SMCJ22CA	22.0	24.40	26.90	1	1	35.5	42.3	C22A	C22C
SMCJ24A	SMCJ24CA	24.0	26.70	29.50	1	1	38.9	38.6	C24A	C24C
SMCJ26A	SMCJ26CA	26.0	28.90	31.90	1	1	42.1	35.7	C26A	C26C
SMCJ28A	SMCJ28CA	28.0	31.10	34.40	1	1	45.4	33.1	C28A	C28C
SMCJ30A	SMCJ30CA	30.0	33.30	36.80	1	1	48.4	31.0	C30A	C30C
SMCJ33A	SMCJ33CA	33.0	36.70	40.60	1	1	53.3	28.2	C33A	C33C
SMCJ36A	SMCJ36CA	36.0	40.00	44.20	1	1	58.1	25.9	C36A	C36C
SMCJ40A	SMCJ40CA	40.0	44.40	49.10	1	1	64.5	23.3	C40A	C40C
SMCJ43A	SMCJ43CA	43.0	47.80	52.80	1	1	69.4	21.7	C43A	C43C
SMCJ45A	SMCJ45CA	45.0	50.00	55.30	1	1	72.7	20.6	C45A	C45C
SMCJ48A	SMCJ48CA	48.0	53.30	58.90	1	1	77.4	19.4	C48A	C48C
SMCJ51A	SMCJ51CA	51.0	56.70	62.70	1	1	82.4	18.2	C51A	C51C
SMCJ54A	SMCJ54CA	54.0	60.00	66.30	1	1	87.1	17.3	C54A	C54C
SMCJ58A	SMCJ58CA	58.0	64.40	71.20	1	1	93.6	16.1	C58A	C58C
SMCJ60A	SMCJ60CA	60.0	66.70	73.70	1	1	96.8	15.5	C60A	C60C
SMCJ64A	SMCJ64CA	64.0	71.10	78.60	1	1	103.0	14.6	C64A	C64C
SMCJ70A	SMCJ70CA	70.0	77.80	86.00	1	1	113.0	13.3	C70A	C70C
SMCJ75A	SMCJ75CA	75.0	83.20	92.10	1	1	121.0	12.4	C75A	C75C
SMCJ78A	SMCJ78CA	78.0	86.70	95.80	1	1	126.0	11.9	C78A	C78C
SMCJ85A	SMCJ85CA	85.0	94.40	104.00	1	1	137.0	11.0	C85A	C85C
SMCJ90A	SMCJ90CA	90.0	100.00	111.00	1	1	146.0	10.3	C90A	C90C
SMCJ100A	SMCJ100CA	100.0	111.00	123.00	1	1	162.0	9.3	C100A	C100C
SMCJ110A	SMCJ110CA	110.0	122.00	135.00	1	1	177.0	8.5	C110A	C110C
SMCJ120A	SMCJ120CA	120.0	133.00	147.00	1	1	193.0	7.8	C120A	C120C
SMCJ130A	SMCJ130CA	130.0	144.00	159.00	1	1	209.0	7.2	C130A	C130C
SMCJ150A	SMCJ150CA	150.0	167.00	185.00	1	1	243.0	6.2	C150A	C150C
SMCJ160A	SMCJ160CA	160.0	178.00	197.00	1	1	259.0	5.8	C160A	C160C
SMCJ170A	SMCJ170CA	170.0	189.00	209.00	1	1	275.0	5.5	C170A	C170C
SMCJ180A	SMCJ180CA	180.0	201.00	222.00	1	1	292.0	5.1	C180A	C180C
SMCJ190A	SMCJ190CA	190.0	211.00	233.00	1	1	308.0	4.9	C190A	C190C
SMCJ200A	SMCJ200CA	200.0	224.00	247.00	1	1	324.0	4.6	C200A	C200C
SMCJ210A	SMCJ210CA	210.0	237.00	263.00	1	1	340.0	4.4	C210A	C210C
SMCJ220A	SMCJ220CA	220.0	246.00	272.00	1	1	356.0	4.2	C220A	C220C
SMCJ250A	SMCJ250CA	250.0	279.00	309.00	1	1	405.0	3.7	C250A	C250C
SMCJ300A	SMCJ300CA	300.0	335.00	371.00	1	1	486.0	3.1	C300A	C300C
SMCJ350A	SMCJ350CA	350.0	391.00	435.00	1	1	567.0	2.6	C350A	C350C
SMCJ400A	SMCJ400CA	400.0	447.00	494.00	1	1	648.0	2.3	C400A	C400C
SMCJ440A	SMCJ440CA	440.0	492.00	543.00	1	1	713.0	2.1	C440A	C440C