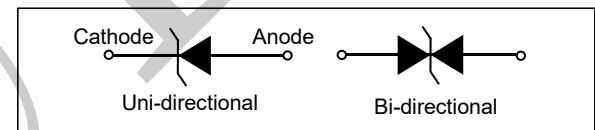
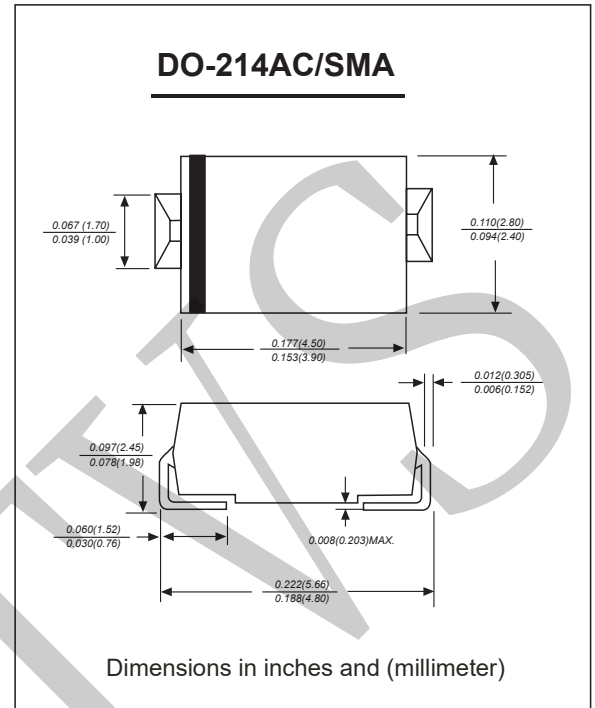


Features

- 400W peak pulse power capability with a 10/1000 μ s waveform, repetitive rate(duty cycle):0.01%
- Uni and Bidirectional unit
- Low leakage
- Very fast response time
- Excellent clamping capability
- RoHS compliant

Mechanical Data

- Lead: Solderable per MIL-STD-750, method 2026
- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end except Bipolar
- Mounting position: Any



Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak power dissipation with a 10/1000 μ s waveform ⁽¹⁾	P_{PP}	400	W
Peak pulse current with a 10/1000 μ s waveform ⁽¹⁾	I_{PP}	See Next Table	A
Power dissipation on infinite heatsink at $T_L = 75^{\circ}\text{C}$	P_D	1.0	W
Peak forward surge current, 8.3 ms single half sine-wave unidirectional only ⁽²⁾	I_{FSM}	40	A
Maximum instantaneous forward voltage at 25A for unidirectional only	V_F	3.5/5.0	V
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to +150	$^{\circ}\text{C}$

Note:

(1)Non-repetitive current pulse per Fig.5 and derated above $T_A= 25^{\circ}\text{C}$ per Fig.1

(2)Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum

Ratings and Characteristics Curves($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1-Pulse Derating Curve

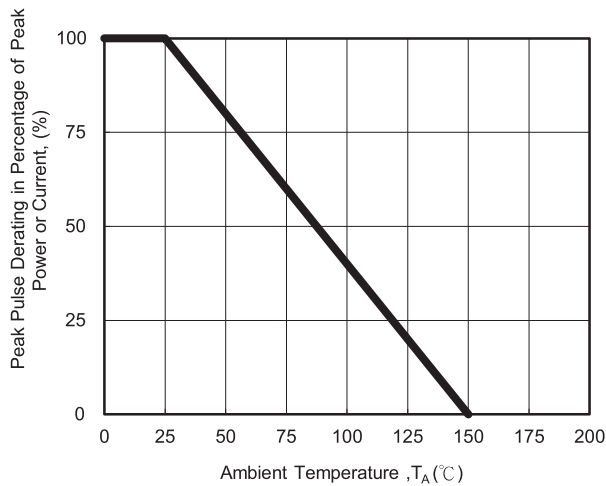


Fig.2-Maximum Non-Repetitive Surge Current

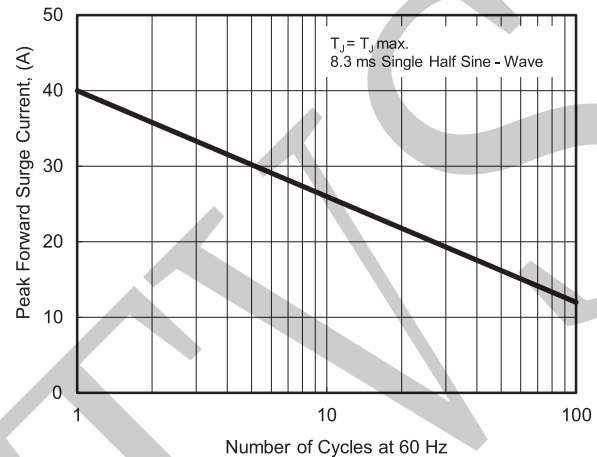


Fig.3-Steady State Power Derating Curve

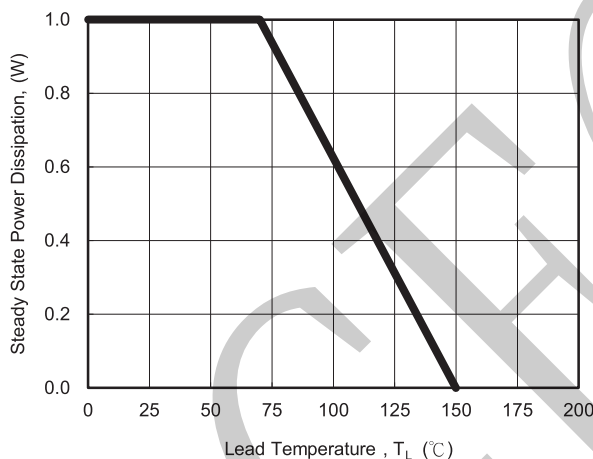


Fig.4-Peak Power Rating Curve

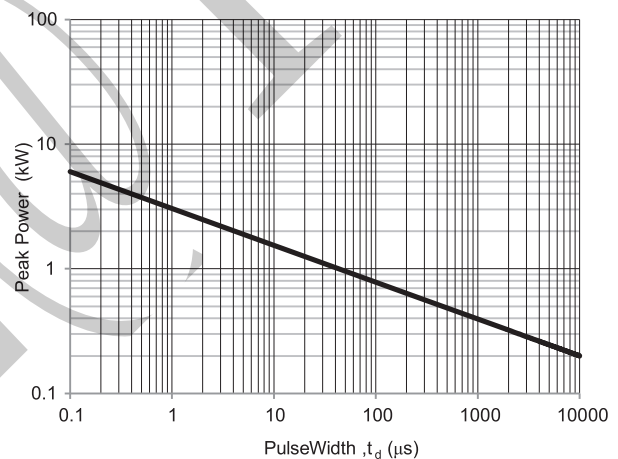


Fig.5-Pulse Waveform

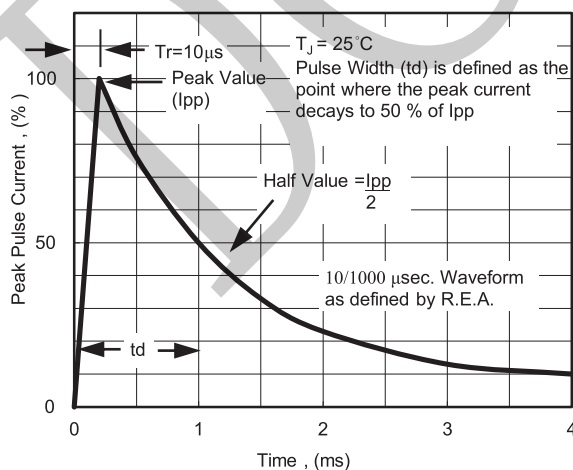
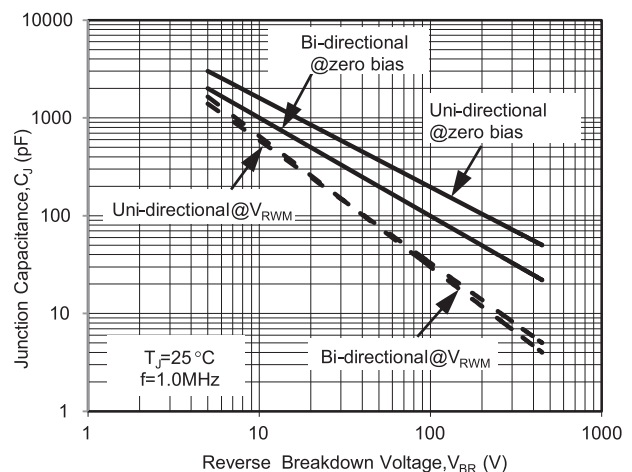


Fig.6-Typical Junction Capacitance



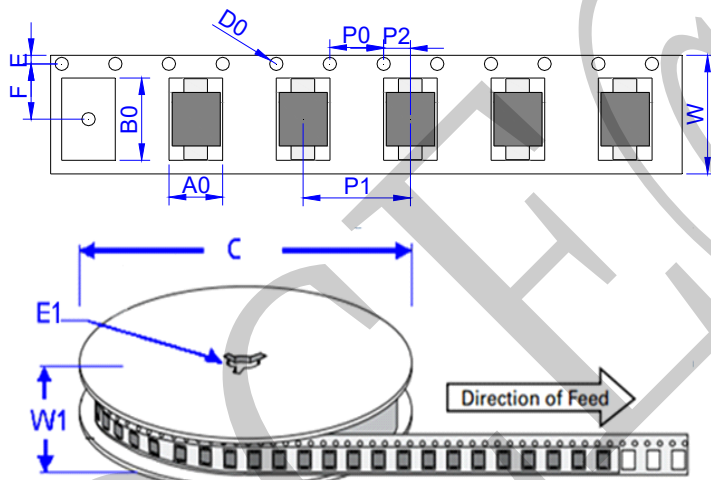
Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Part Number	Device Marking Code	Reverse Stand-off Voltage	Breakdown Voltage Min.@ I_T	Breakdown Voltage Max.@ I_T	Test Current	Maximum Clamping Voltage @ I_{PP}	Peak Pulse Current	Reverse Leakage @ V_{RWM}
BI-POLAR	BI	$V_{RWM}(V)$	$V_{BR}(V)$	$V_{BR}(V)$	$I_T(mA)$	$V_C(V)$	$I_{PP}(A)$	$I_R(\mu A)$
SMAJ58CA	DG	58	64.40	71.20	1	93.6	4.3	1

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SMAJ58CA	DO-214AC(SMA)	7500PCS	13"

TAPE AND REEL SPECIFICATION-SMA



Ref.	Dimensions	
	Millimeters	Inches
A0	2.79 ± 0.3	0.110 ± 0.012
B0	5.33 ± 0.3	0.210 ± 0.012
C	330.0	13.0
D0	1.55 ± 0.1	0.061 ± 0.004
E	1.75 ± 0.2	0.069 ± 0.008
E1	13.3 ± 0.3	0.524 ± 0.012
F	5.5 ± 0.2	0.217 ± 0.008
P0	4.00 ± 0.2	0.157 ± 0.008
P1	4.00 ± 0.2	0.157 ± 0.008
P2	2.00 ± 0.2	0.079 ± 0.008
W	12.0 ± 0.2	0.472 ± 0.008
W1	15.7 ± 2.0	0.618 ± 0.079

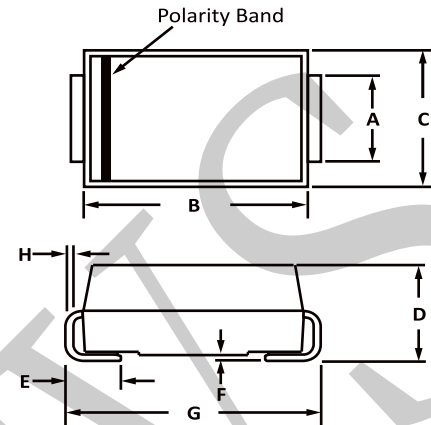
PART No.	UNIT WEIGHT (g/PCS) typ.	REEL (PCS)	PER CARTON (PCS)	DESCRIPTION
SMAJ58CA	0.07	7,500	120,000	13 inch reel pack

DO-214AC(SMA) Package Dimension

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.23	1.63	0.048	0.064
B	4.10	4.55	0.161	0.179
C	2.60	2.80	0.102	0.110
D	2.15	2.35	0.085	0.093
E	0.75	1.51	0.030	0.059
F	0.02	0.20	0.001	0.008
G	4.87	5.22	0.192	0.206
H	0.15	0.30	0.006	0.012

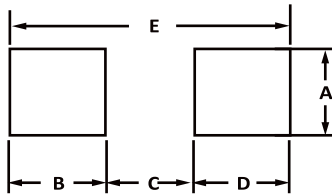
NOTES:

1. Dimensions are exclusive of mold flash and metal burrs
2. Polarity Band is only applicable to the unidirectional package



RECOMMENDED PAD LAYOUT DIMENSIONS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.63	-	0.064	-
B	1.45	-	0.057	-
C	-	2.28	-	0.090
D	1.45	-	0.057	-
E	5.28 REF		0.208 REF	



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