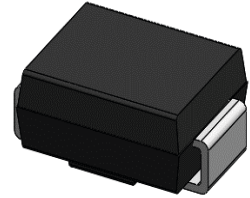


Features

- Low clamping voltage
- Small package: DO-214AA (SMB)
- Bi-directional
- Surge capability: 4.5KV at 10/700μS
- Moisture sensitivity level: Level 1



RoHS
COMPLIANT



DO-214AA (SMB)

Applications

- POE
- DC-48V

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (t _p =10/1000μS)	P _{PK}	3000	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±30	KV
ESD per IEC 61000-4-2 (Contact)		±30	
Typical Junction Capacitance (4V, 1MHz)	C _J	361	pF
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

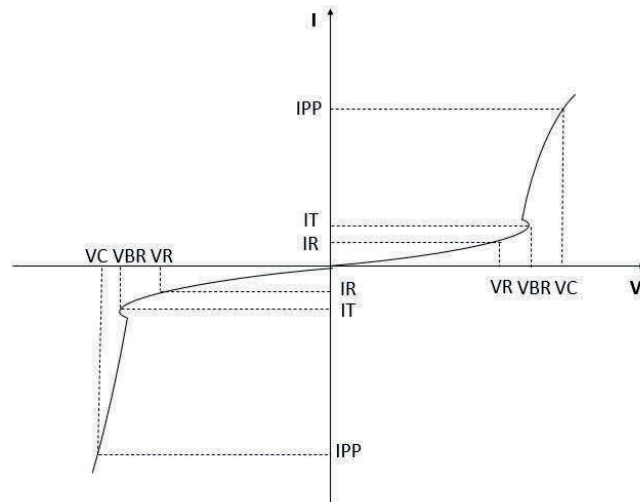
Electrical Characteristics

(Absolute maximum ratings measured at T=25°C, RH=45%-75% unless otherwise noted)

Part Number	Device Marking Code	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max Reverse Leakage Current	Peak Pulse Current	Max. Clamp Voltage
		V _{WM}	V _{BR} @ I _T		I _T	I _R @ V _{WM}	I _{PPM}	V _C @ I _{PPM}
			Min	Max				
		V	V	V	mA	μA	A	V
GSMB30J58CA	3DG	58	62.4	71.2	1	1	40	85

V-I Curve

Definition	Parameters
Clamping Voltage	V_C
Surge Waveform	I_{PP}
Stand-Off Voltage	V_R / V_{WM}
Breakdown Voltage	V_{BR}
Reverse Leakage Current	I_R
Test Current	I_T
Peak Pulse Power Dissipation	P_{PP}



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

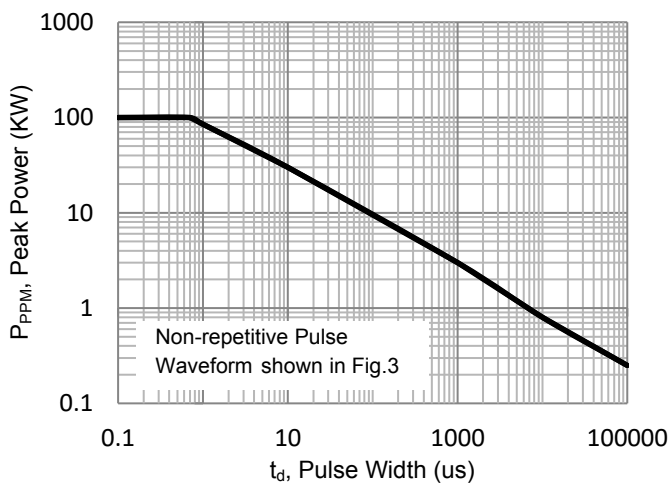


Figure 1. Peak Pulse Power Vs. Pulse Width

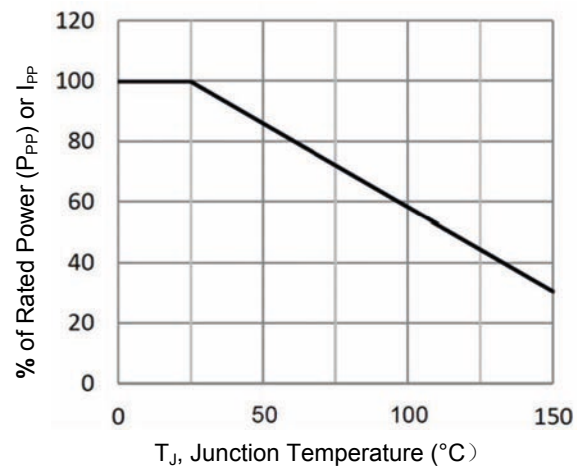


Figure 2. Pulse Power or Current Vs. Initial Junction Temperature

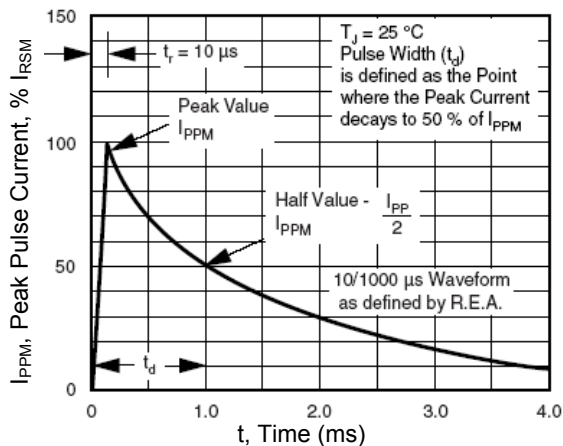
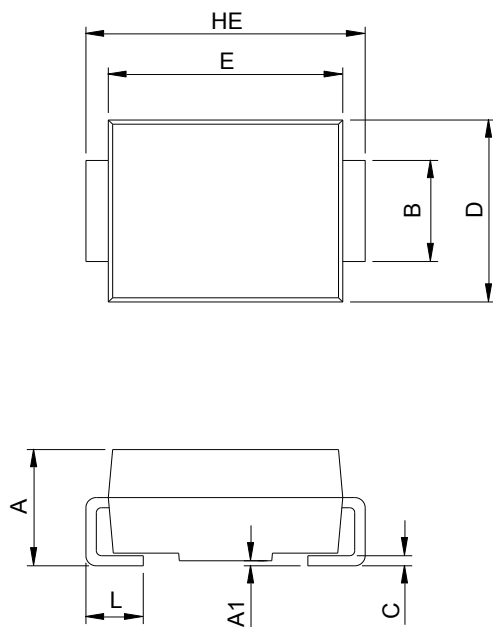


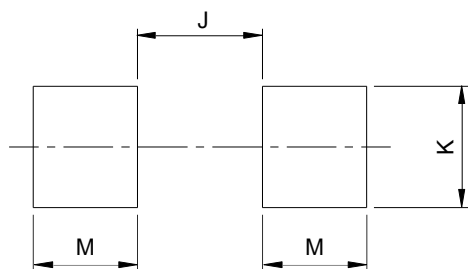
Figure 3. Pulse Waveform

Package Outline Dimensions DO-214AA(SMB)



SMB (DO-214AA)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.95	2.65	0.077	0.104
A1	0.00	0.20	0.000	0.008
B	1.95	2.20	0.077	0.087
C	0.15	0.31	0.006	0.012
D	3.30	3.95	0.130	0.156
E	4.06	4.60	0.160	0.181
HE	5.10	5.60	0.201	0.220
L	0.76	1.60	0.030	0.063

Recommended Pad Layout



Recommended Pad Layout (Reference ONLY)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	-	2.60	-	0.102
K	2.20	-	0.087	-
M	1.80	-	0.071	-

Order Information

Device	Package	Marking	Carrier	Quantity
GSMB30J58CA	DO-214AA (SMB)	3DG	Tape & Reel	3,000 Pcs / Reel

For more information, please contact us at: inquiry@goodarksemi.com