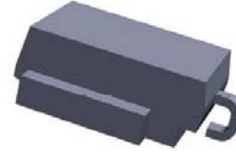


Features

- High current capability
- Low Forward Voltage Drop
- Low reverse current
- Low thermal resistance
- Excellent high temperature stability
- Low power loss and high efficiency
- High forward surge capability
- Meets ISO7637-2 surge specification
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- AEC-Q101 qualified



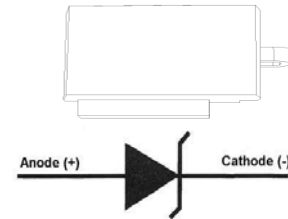
DO-218

Application

- High peak power
- High-temperature
- Clamping diode
- Load switching and lighting

Mechanical Data

- Case: DO-218 outline plastic package
- Terminals: Matte tin plated, solderable per MIL-STD-750, Method 2026, J-STD-002 and JESD 22-B102
- Molding Compound Flammability Rating:UL94-0
- High temperature soldering guaranteed: 260°C 10second
- HE3 suffix meets JESD 201 class 2 whisker test
- Polarity: Heatsink is anode
- Corresponds to taping packages. (500PCS/Reel)



Polarity: Heatsink is anode

Primary Characteristics

VWM	10 to 43 V
VBR	11.1 to 52.8 V
PPPM (10 x 1000 uS)	6600 W
PPPM (10 x 10000 uS)	5200 W
PD	8 W
IFSM	700 A
Polarity	Uni-directional
Diode variation	Single



Marking Information

Maximum Ratings (TA = 25 °C unless otherwise noted)

Parameter	Symbol	Value	Units
		10/1000 μs waveform	6600
Peak pulse power dissipation	PPPM	5200	W
Power dissipation on infinite heatsink at TC = 25 °C	PD	8.0	W
Peak forward surge current 8.3 ms single half sine-wave	IFSM	700	A
Operating junction and storage temperature range	TJ, TSTG	-55 to +175	°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)

Part Number	Breakdown Voltage VBR (V)		Test Current IT (mA)	Stand-OFF Voltage VWM (V)	Maximum Reverse Leakage at VWM ID (uA)	Maximum Leakage at VWM TJ = 175 °C ID (uA)	Max. Peak Pulse Current at 10/1000 us Waveform (A)	Maximum Clamping Voltage at IPPM VC (V)
	Min.	Max.						
GAM8W10	11.1	13.6	5.0	10.0	15	250	351	18.8
GAM8W10A		12.3	5.0	10.0	15	250	388	17.0
GAM8W11	12.2	14.9	5.0	11.0	10	150	328	20.1
GAM8W11A		13.5	5.0	11.0	10	150	363	18.2
GAM8W12	13.3	16.3	5.0	12.0	10	150	300	22.0
GAM8W12A		14.7	5.0	12.0	10	150	332	19.9
GAM8W13	14.4	17.6	5.0	13.0	10	150	277	23.8
GAM8W13A		15.9	5.0	13.0	10	150	307	21.5
GAM8W14	15.6	19.1	5.0	14.0	10	150	256	25.8
GAM8W14A		17.2	5.0	14.0	10	150	284	23.2
GAM8W15	16.7	20.4	5.0	15.0	10	150	245	26.9
GAM8W15A		18.5	5.0	15.0	10	150	270	24.4
GAM8W16	17.8	21.8	5.0	16.0	10	150	229	28.8
GAM8W16A		19.7	5.0	16.0	10	150	254	26.0
GAM8W17	18.9	23.1	5.0	17.0	10	150	216	30.5
GAM8W17A		20.9	5.0	17.0	10	150	239	27.6
GAM8W18	20.0	24.4	5.0	18.0	10	150	205	32.2
GAM8W18A		22.1	5.0	18.0	10	150	226	29.2
GAM8W20	22.2	27.1	5.0	20.0	10	150	184	35.8
GAM8W20A		24.5	5.0	20.0	10	150	204	32.4
GAM8W22	24.4	29.8	5.0	22.0	10	150	168	39.4
GAM8W22A		26.9	5.0	22.0	10	150	186	35.5
GAM8W24	26.7	32.6	5.0	24.0	10	150	153	43.0
GAM8W24A		29.5	5.0	24.0	10	150	170	38.9
GAM8W26	28.9	35.3	5.0	26.0	10	150	142	46.6
GAM8W26A		31.9	5.0	26.0	10	150	157	42.1
GAM8W28	31.1	38.0	5.0	28.0	10	150	132	50.1
GAM8W28A		34.4	5.0	28.0	10	150	145	45.4
GAM8W30	33.3	40.7	5.0	30.0	10	150	123	53.5
GAM8W30A		36.8	5.0	30.0	10	150	136	48.4
GAM8W33	36.7	44.9	5.0	33.0	10	150	112	59.0
GAM8W33A		40.6	5.0	33.0	10	150	124	53.3
GAM8W36	40.0	48.9	5.0	36.0	10	150	103	64.3
GAM8W36A		44.2	5.0	36.0	10	150	114	58.1
GAM8W40	44.4	54.3	5.0	40.0	10	150	92.4	71.4
GAM8W40A		49.1	5.0	40.0	10	150	102	64.5
GAM8W43	47.8	58.4	5.0	43.0	10	150	86	76.7
GAM8W43A		52.8	5.0	43.0	10	150	95.1	69.4

Note: For all types maximum VF = 1.8 V at IF = 100 A measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum

Thermal Characteristics (TA = 25 °C unless otherwise noted)

Parameter	Symbol	Value	Units
Typical thermal resistance, junction to case	RejC	0.90	°C/W

Typical Performance Characteristics

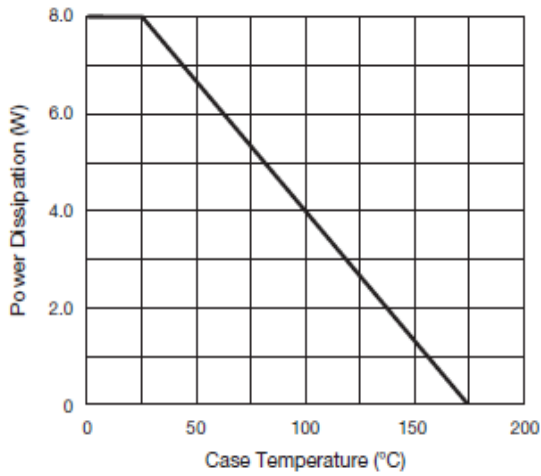


Fig. 1 - Power Derating Curve

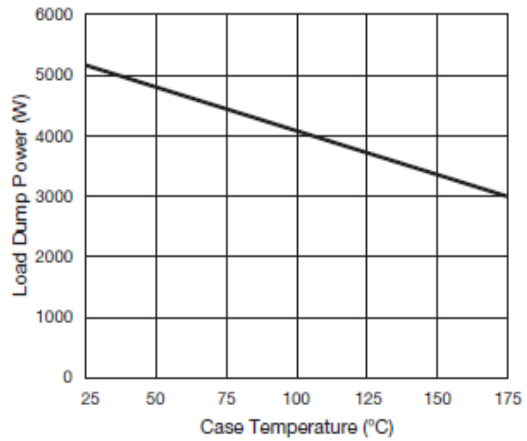


Fig. 2 - Load Dump Power Characteristics
(10 ms Exponential Waveform)

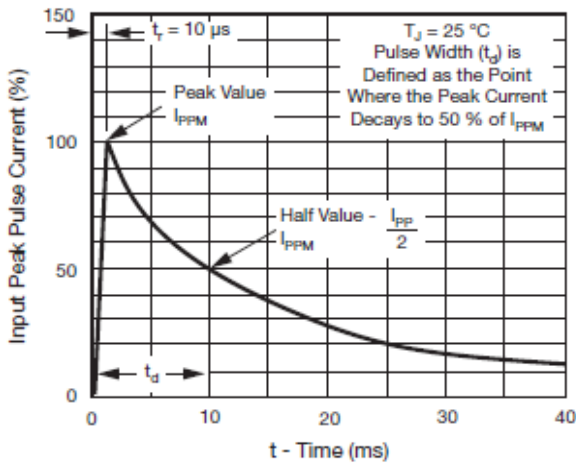


Fig. 3 - Pulse Waveform

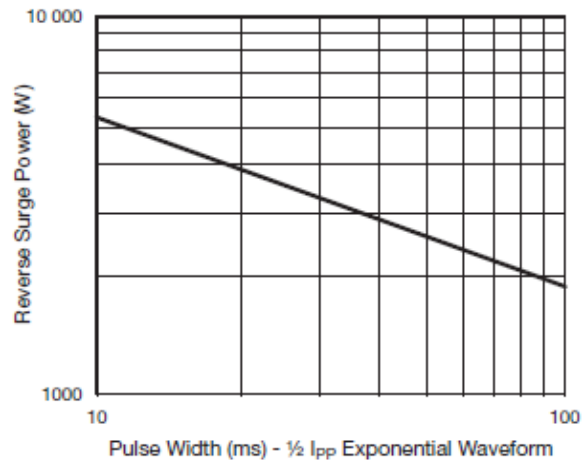


Fig. 4 - Reverse Power Capability

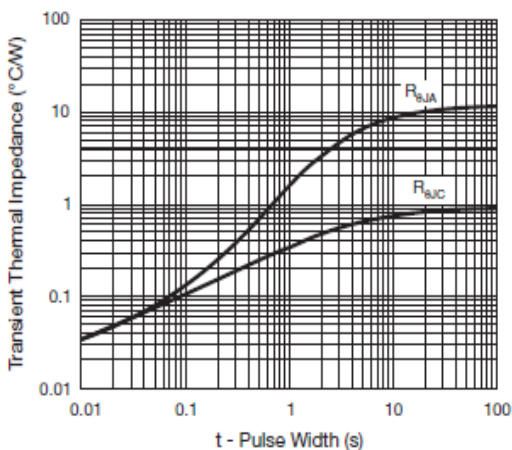


Fig. 5 - Typical Transient Thermal Impedance

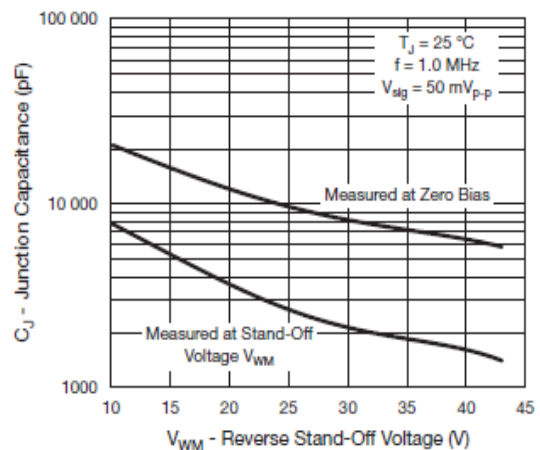
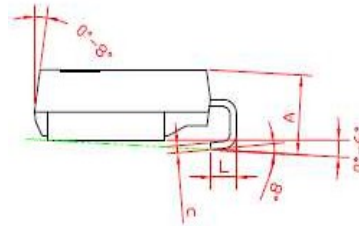
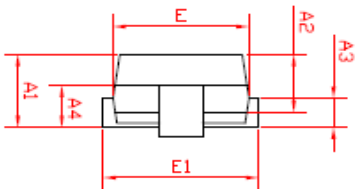
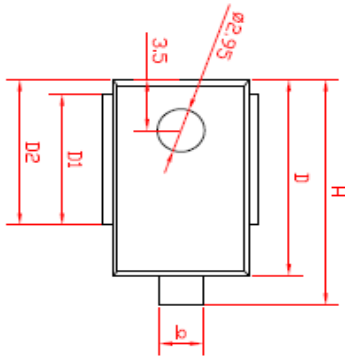


Fig. 6 - Typical Junction Capacitance

Physical Dimensions

DO-218



SYMBOLS	DIMENSIONS IN MILLIMETERS		
	MIN	NOM	MAX
A	4.70	-	5.70
A1	4.70	5.00	5.25
A2	3.45	3.95	4.25
A3	1.70	2.00	2.50
A4	2.65	3.10	3.55
b	2.30	-	3.00
c	0.45	-	0.90
D	13.20	13.50	13.80
D1	8.70	9.00	9.30
D2	9.70	10.00	10.30
E	8.20	8.50	8.80
E1	9.50	-	10.00
H	15.00	15.50	16.00
L	1.50	2.00	2.50

Foot Print Recommendation (mm)

