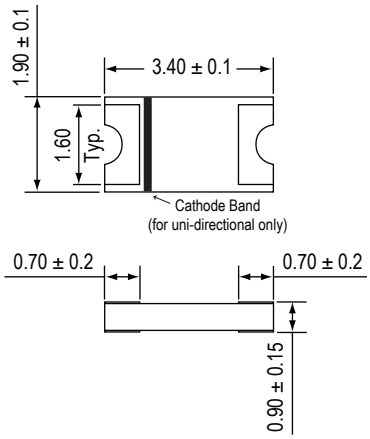
AUSMF4C SERIES

High power density 400W TVS

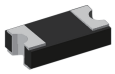
Reverse Voltage - 5 to 100 Volts *Peak Pulse Power - 400 Watts*

A1206



*Dimensions in millimeters

CoolTc™



FEATURES

* Halogen-free type
* Compliance to RoHS product
* Glass passivated chip
* 400W surge capability in SOD-123 equivalent package
* Occupy onle half the PCB area when compared to competitive TVS diodes in SMA packages
* 400W peak pulse power capability with a 10/1000 μs wavefrom, repetitive rate (duty cycle) : 0.01%
* Low leakage
* Excellent clamping capability
* Very fast response time
* Comply with AEC-Q101
* Automotive

MECHANICAL DATA

Case : A1206

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
single phase, half wave, 60Hz resistive or inductive load.
for capacitive load, derate current by 20%

RATING	SYMBOL	VALUE	UNITS
Peak power dissipation with a 10/1000 μs waveform	P_{PPM}	400	Watts
Peak pulse current with a 10/1000 μs waveform	I_{PPM}	See next table	Amps
Power dissipation on infinite heatsink at T_L = 75℃	P_D	3.3	Watts
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150	℃
Peak forward surge current 8.3 ms single half sine-wave (uni-directional only)	I_{FSM}	60	Amps
Maximum instantaneous forward voltage at 25A (uni-directional only)	V_F	5.0	Volts

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PART NUMBER		Marking Code		Working Peak Reverse Voltage V_{RWM} (V)	Breakdown Voltage V_{BR} @I_T			Maximum Clamping Voltage V_C (V) @ I_{PP}	Maximum Reverse Surge Current I_{PP} (A) 10 x 1000 μs	Maximum Reverse Leakage I_R (μA) @V_{RWM}
UNI-POLAR	BI-POLAR	UNI-POLAR	BI-POLAR		Min. (V)	Max. (V)	I_T (mA)			
AUSMF4C5.0AH	AUSMF4C5.0CAH	.A. 5.0	.CA. 5.0	5.0	6.4	7.00	10	9.2	43.5	800
AUSMF4C8.0AH	AUSMF4C8.0CAH	.A. 8.0	.CA. 8.0	8.0	8.9	9.83	1	13.6	29.4	50
AUSMF4C10AH	AUSMF4C10CAH	.A. 10	.CA. 10	10	11.1	12.3	1	17.0	23.5	5
AUSMF4C11AH	AUSMF4C11CAH	.A. 11	.CA. 11	11	12.2	13.5	1	18.2	22.0	5
AUSMF4C12AH	AUSMF4C12CAH	.A. 12	.CA. 12	12	13.3	14.7	1	19.9	20.1	5
AUSMF4C14AH	AUSMF4C14CAH	.A. 14	.CA. 14	14	15.6	17.2	1	23.2	17.2	5
AUSMF4C16AH	AUSMF4C16CAH	.A. 16	.CA. 16	16	17.8	19.7	1	26.0	15.4	5
AUSMF4C18AH	AUSMF4C18CAH	.A. 18	.CA. 18	18	20.0	22.1	1	29.2	13.7	1
AUSMF4C20AH	AUSMF4C20CAH	.A. 20	.CA. 20	20	22.2	24.5	1	32.4	12.4	1
AUSMF4C22AH	AUSMF4C22CAH	.A. 22	.CA. 22	22	24.4	26.9	1	35.5	11.3	1
AUSMF4C24AH	AUSMF4C24CAH	.A. 24	.CA. 24	24	26.7	29.5	1	38.9	10.3	1
AUSMF4C26AH	AUSMF4C26CAH	.A. 26	.CA. 26	26	28.9	31.9	1	42.1	9.5	1
AUSMF4C28AH	AUSMF4C28CAH	.A. 28	.CA. 28	28	31.1	34.4	1	45.4	8.8	1
AUSMF4C30AH	AUSMF4C30CAH	.A. 30	.CA. 30	30	33.3	36.8	1	48.4	8.3	1
AUSMF4C33AH	AUSMF4C33CAH	.A. 33	.CA. 33	33	36.7	40.6	1	53.3	7.5	1
AUSMF4C36AH	AUSMF4C36CAH	.A. 36	.CA. 36	36	40.0	44.2	1	58.1	6.9	1
AUSMF4C40AH	AUSMF4C40CAH	.A. 40	.CA. 40	40	44.4	49.1	1	64.5	6.2	1
AUSMF4C43AH	AUSMF4C43CAH	.A. 43	.CA. 43	43	47.8	52.8	1	69.4	5.8	1
AUSMF4C45AH	AUSMF4C45CAH	.A. 45	.CA. 45	45	50.0	55.3	1	72.7	5.5	1
AUSMF4C48AH	AUSMF4C48CAH	.A. 48	.CA. 48	48	53.3	58.9	1	77.4	5.2	1
AUSMF4C51AH	AUSMF4C51CAH	.A. 51	.CA. 51	51	56.7	62.7	1	82.4	4.9	1
AUSMF4C54AH	AUSMF4C54CAH	.A. 54	.CA. 54	54	60.0	66.3	1	87.1	4.6	1
AUSMF4C58AH	AUSMF4C58CAH	.A. 58	.CA. 58	58	64.4	71.2	1	93.6	4.3	1
AUSMF4C60AH	AUSMF4C60CAH	.A. 60	.CA. 60	60	66.7	73.7	1	96.8	4.1	1
AUSMF4C64AH	AUSMF4C64CAH	.A. 64	.CA. 64	64	71.1	78.6	1	103	3.9	1
AUSMF4C70AH	AUSMF4C70CAH	.A. 70	.CA. 70	70	77.8	86.0	1	113	3.5	1
AUSMF4C75AH	AUSMF4C75CAH	.A. 75	.CA. 75	75	83.3	92.1	1	121	3.3	1
AUSMF4C78AH	AUSMF4C78CAH	.A. 78	.CA. 78	78	86.7	95.8	1	126	3.2	1
AUSMF4C85AH	AUSMF4C85CAH	.A. 85	.CA. 85	85	94.4	104	1	137	2.9	1
AUSMF4C90AH	AUSMF4C90CAH	.A. 90	.CA. 90	90	100	111	1	146	2.7	1
AUSMF4C100AH	AUSMF4C100CAH	.A. 100	.CA. 100	100	111	123	1	162	2.5	1

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- PULSE DERATING CURVE

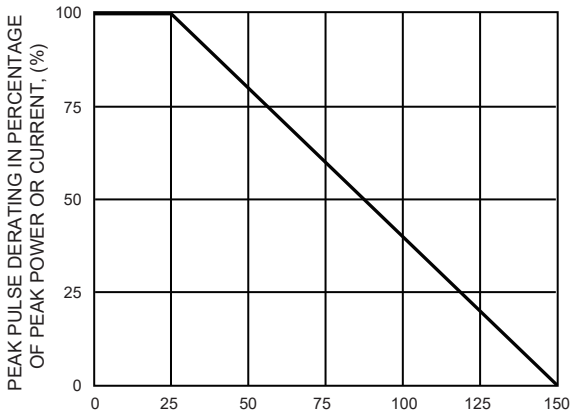

FIG. 2- STEADY STATE POWER DERATING CURVE

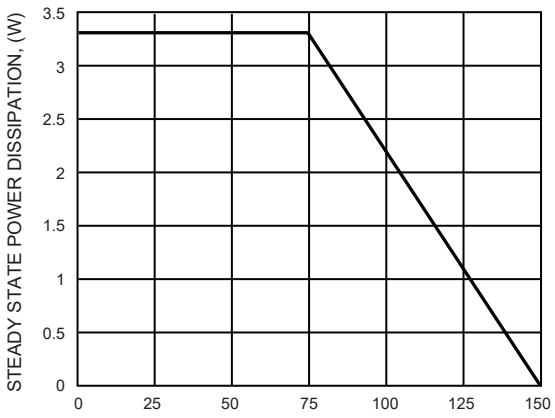

FIG. 3 - PEAK PULSE POWER RATING CURVE

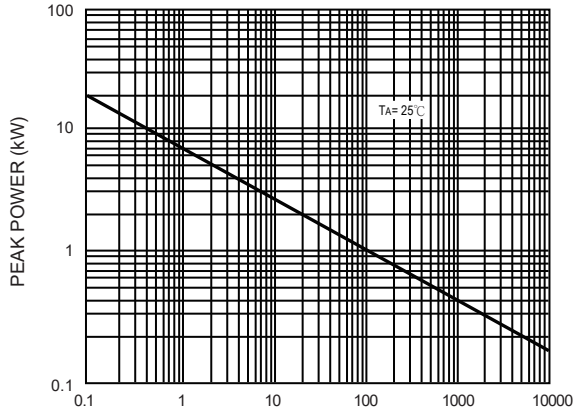

FIG. 4 - PULSE WAVEFORM