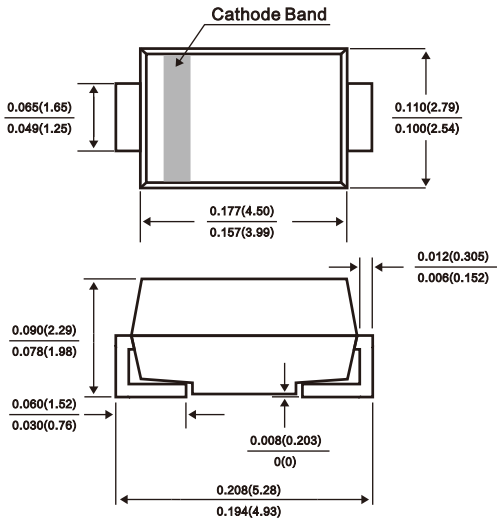
FEATURES

- For surface mounted applications in order to optimize board space
- Glass passivated junction
- Built-in strain relief
- Excellent clamping capability
- Low profile package
- Low inductance
- Excellent clamping capability
- Fast response time: typically less than 1.0 ps from 0 volts to BV min
- Typical IR less than 1μA above 10V
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

SMA(DO-214AC)



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC DO-214AC Molded plastic
Terminal： Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denoted positive end (cathode) except Bipolar
Standard Packaging: 12mm tape(EIA STD RS-481)
Weight: 0.002 ounces, 0.061 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation at T_A = 25 °C, T_P = 1ms (Note 1)	P_{PPM}	Minimum 400	Watts
Maximum Instantaneous Forward Voltage at 25.0A for Unidirectional Only	V_F	**3.5**	**Volts**
Steady State Power Dissipation at T_L = 75°C Lead lengths .375", 9.5mm (Note 2)	$P_{M(AV)}$	1.0	Watts
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load, (JEDEC Method)(Note 3)	I_{FSM}	40	Amps
Operatings and Storage Temperature Range	T_J, T_{STG}	-55 +150	°C

NOTES:

1. Non-repetitive current pulse, per Fig.3 and derated above Ta=25 °C per Fig.2.
2. Mounted on 5.0mm² (0.03mm thick) Copper Pads to each termina
3. 8.3ms single half sine-wave, or equivalent square wave, Duty cycle=4 pulses per minutes maximum.

P4SMA PART NUMBER			MARKING CODE		REVERSE STAND-OFF VOLTAGE V_{RWM}(V)	BREAKDOWN VOLTAGE V_{BR}(V) MIN.@I_T	BREAKDOWN VOLTAGE V_{BR}(V) MAX.@I_T	TEST CURRENT I_T (mA)	MAXIMUM CLAMPING VOLTAGE @Ipp Vc(V)	PEAK PULSE CURRENT Ipp (A)	REVERSE LEAKAGE @ VRWM IR(μA)
			UNI-POLAR	BI-POLAR							
P4SMA	6.8A	6.8CA	AE	WE	5.80	6.45	7.14	10	10.5	39.0	1000
P4SMA	7.5A	7.5CA	AK	WK	6.40	7.13	7.88	10	11.3	36.3	500
P4SMA	8.2A	8.2CA	AM	WM	7.02	7.79	8.61	10	12.1	33.9	200
P4SMA	9.1A	9.1CA	AR	WR	7.78	8.65	9.55	1	13.4	30.6	50
P4SMA	10A	10CA	AT	WT	8.55	9.50	10.50	1	14.5	28.3	10
P4SMA	11A	11CA	AV	WV	9.40	10.50	11.60	1	15.6	26.3	5
P4SMA	12A	12CA	AX	WX	10.20	11.40	12.60	1	16.7	24.6	5
P4SMA	13A	13CA	AZ	WZ	11.10	12.40	13.70	1	18.2	22.5	5
P4SMA	15A	15CA	BG	XG	12.80	14.30	15.80	1	21.2	19.3	5
P4SMA	16A	16CA	BK	XK	13.60	15.20	16.80	1	22.5	18.2	5
P4SMA	18A	18CA	BP	XP	15.30	17.10	18.90	1	25.5	16.1	5
P4SMA	20A	20CA	BR	XR	17.10	19.00	21.00	1	27.7	14.8	5
P4SMA	22A	22CA	BT	XT	18.80	20.90	23.10	1	30.6	13.4	5
P4SMA	24A	24CA	BV	XV	20.50	22.80	25.20	1	33.2	12.3	5
P4SMA	27A	27CA	BZ	XZ	23.10	25.70	28.40	1	37.5	10.9	5
P4SMA	30A	30CA	CE	YE	25.60	28.50	31.50	1	41.4	9.9	5
P4SMA	33A	33CA	CG	YG	28.20	31.40	34.70	1	45.7	9.0	5
P4SMA	36A	36CA	CK	YK	30.80	34.20	37.80	1	49.9	8.2	5
P4SMA	39A	39CA	CM	YM	33.30	37.10	41.00	1	53.9	7.6	5
P4SMA	43A	43CA	CP	YP	36.80	40.90	45.20	1	59.3	6.9	5
P4SMA	47A	47CA	CR	YR	40.20	44.70	49.40	1	64.8	6.3	5
P4SMA	51A	51CA	CV	YV	43.60	48.50	53.60	1	70.1	5.8	5
P4SMA	56A	56CA	CX	YX	47.80	53.20	58.80	1	77.0	5.3	5
P4SMA	62A	62CA	RE	ZE	53.00	58.90	65.10	1	85.0	4.8	5
P4SMA	68A	68CA	RG	ZG	58.10	64.60	71.40	1	92.0	4.5	5
P4SMA	75A	75CA	RM	ZM	64.10	71.30	78.80	1	103.0	4.0	5
P4SMA	82A	82CA	RP	ZP	70.10	77.90	86.10	1	113.0	3.6	5
P4SMA	91A	91CA	RR	ZR	77.80	86.50	95.50	1	125.0	3.3	5
P4SMA	100A	100CA	RV	ZV	85.50	95.00	105.00	1	137.0	3.0	5
P4SMA	110A	110CA	RX	ZX	94.00	105.00	116.00	1	152.0	2.7	5
P4SMA	120A	120CA	RZ	ZZ	102.00	114.00	126.00	1	165.0	2.5	5
P4SMA	130A	130CA	SE	VE	111.00	124.00	137.00	1	179.0	2.3	5
P4SMA	150A	150CA	VG	VG	128.00	143.00	158.00	1	207.0	2.0	5
P4SMA	160A	160CA	VK	VK	136.00	152.00	168.00	1	219.0	1.9	5
P4SMA	170A	170CA	VM	VM	145.00	162.00	179.00	1	234.0	1.8	5
P4SMA	180A	180CA			154.00	171.00	189.00	1	246.0	1.7	5
P4SMA	200A	200CA	SR	VR	171.00	190.00	210.00	1	274.0	1.5	5
P4SMA	220A	220CA	SS	VS	185.00	209.00	231.00	1	328.0	1.3	5
P4SMA	250A	250CA	--	--	214.00	237.00	263.00	1	344.0	1.2	5
P4SMA	300A	300CA	--	--	256.00	285.00	315.00	1	414.0	1.0	5
P4SMA	350A	350CA	--	--	300.00	332.00	368.00	1	482.0	0.9	5
P4SMA	400A	400CA	--	--	342.00	380.00	420.00	1	548.0	0.8	5
P4SMA	440A	440CA	--	--	376.00	418.00	462.00	1	602.0	0.7	5
P4SMA	480A	480CA	--	--	408.00	456.00	504.00	1	658.0	0.6	5
P4SMA	510A	510CA	--	--	434.00	485.00	535.00	1	698.0	0.6	5
P4SMA	530A	530CA	--	--	450.00	503.50	556.50	1	725.0	0.6	5
P4SMA	540A	540CA	--	--	459.00	513.00	567.00	1	740.0	0.5	5
P4SMA	550A	550CA	--	--	467.00	522.50	577.50	1	760.0	0.5	5

For bidirectional type having Vrwm of 10 volts and less, the IR limit is double.

The available parts are "A" type only, the parts without A (VBR is ± 10%) are not available.

Fig. 1 - Peak Pulse Power Rating Curve

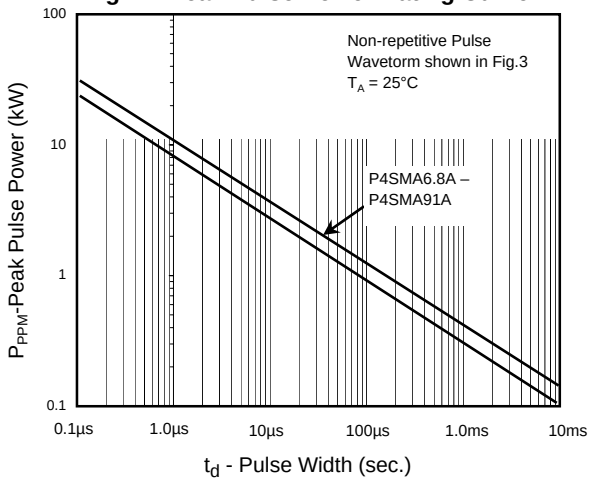


Fig.2 - Pulse Derating Curve

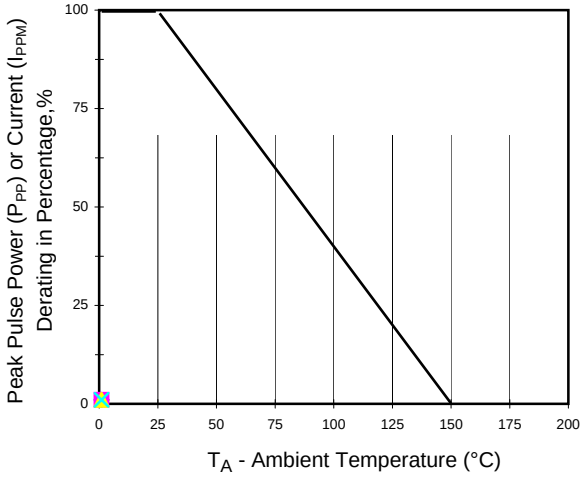


Fig.3 - Pulse Waveform

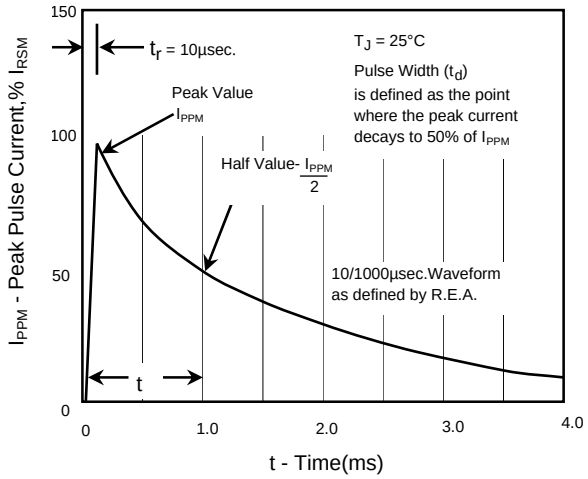


Fig.4 - Typical Junction Capacitance

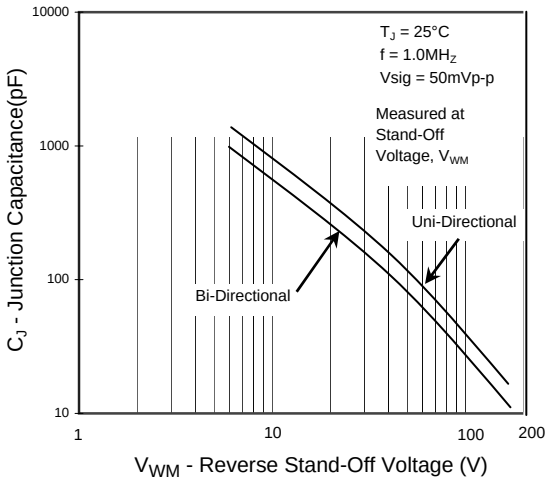


Fig. 5 - Typ.Transient Thermal Impedance

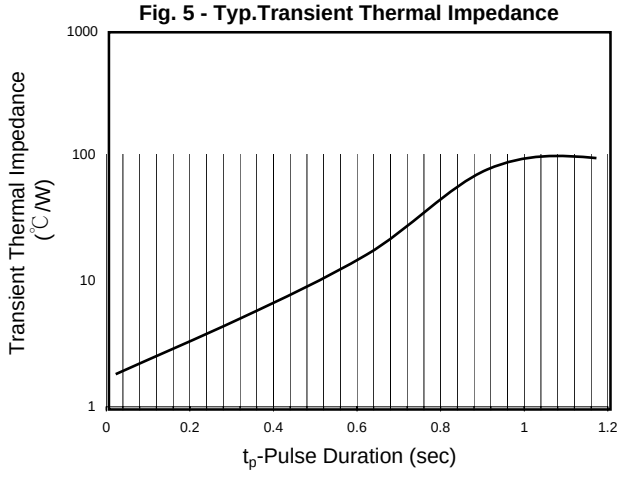


Fig.6 - Maximum Non-Repetitive Peak Forward Surge Current Uni-Directional Only