

Features

- Glass passivated chip
- 600W peak pulse power capability with a 10/1000us waveform, repetition rate (duty cycle): 0.01%
- Excellent clamping capability
- Low reverse leakage
- Fast response time



Package: SMA (DO-214AC)

Mechanical Data

- **Case:** DO-214AC (SMA) molded plastic
- **Lead:** solderable per MIL-STD-750 Method 2026
- **Epoxy:** UL 94V-0 rate flame retardant



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

Parameter	Symbol	Value	Unit
Peak Power Dissipation With a 10/1000us Waveform ¹	P _{PP}	600	W
Peak Pulse Current With a 10/1000us Waveform ¹	I _{PP}	See Next Table	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Uni-Directional Only ²	I _{FSM}	60	A
Power Dissipation On Infinite Heatsink at T _L =75°C	P _D	5.0	W
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Notes:

1. Non-repetitive current pulse, per Fig.5 and derated above T_A=25°C per Fig.1;
2. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum;

Electrical Characteristics (T_A=25°C unless otherwise specified)

Part Number (Uni)	Part Number (Bi)	Marking Code		Breakdown Voltage		Test Current I _T (mA)	Reverse Stand- Off Voltage V _{RWM} (V)	Maximum Clamping Voltage @I _{PP} V _{C MAX} (V)	Maximum Peak Pulse Current I _{PP} (A)	Max. Reverse Leakage @V _{RWM} I _R (uA)
				V _{BR} @ I _T						
				Min. (V)	Max. (V)					
GSMA6J5.0A	GSMA6J5.0CA	KE	AE	6.40	7.00	10	5.0	9.2	65.3	800
GSMA6J6.0A	GSMA6J6.0CA	KG	AG	6.67	7.37	10	6.0	10.3	58.3	800
GSMA6J6.5A	GSMA6J6.5CA	KK	AK	7.22	7.98	10	6.5	11.2	53.6	500
GSMA6J7.0A	GSMA6J7.0CA	KM	AM	7.78	8.60	10	7.0	12.0	50.0	200
GSMA6J7.5A	GSMA6J7.5CA	KP	AP	8.33	9.21	1	7.5	12.9	46.6	100
GSMA6J8.0A	GSMA6J8.0CA	KR	AR	8.89	9.83	1	8.0	13.6	44.2	50
GSMA6J8.5A	GSMA6J8.5CA	KT	AT	9.44	10.4	1	8.5	14.4	41.7	20
GSMA6J9.0A	GSMA6J9.0CA	KV	AV	10.00	11.1	1	9.0	15.4	39.0	10
GSMA6J10A	GSMA6J10CA	KX	AX	11.1	12.3	1	10.0	17.0	35.3	5
GSMA6J11A	GSMA6J11CA	KZ	AZ	12.2	13.5	1	11.0	18.2	33.0	1
GSMA6J12A	GSMA6J12CA	LE	BE	13.3	14.7	1	12.0	19.9	30.2	1

Electrical Characteristics $T_A=25^{\circ}\text{C}$ unless otherwise specified, $V_F=3.5\text{V}$ at $I_F=50\text{A}$ (uni-directional only)

Part Number (Uni)	Part Number (Bi)	Marking Code		Breakdown Voltage		Test Current	Reverse Stand- Off Voltage	Maximum Clamping Voltage @ I_{PP}	Maximum Peak Pulse Current	Max. Reverse Leakage @ V_{RWM}
				V_{BR} @ I_T						
		Uni	Bi	Min. (V)	Max. (V)	I_T (mA)	V_{RWM} (V)	$V_{C\text{ MAX}}$ (V)	I_{PP} (A)	I_R (uA)
GSMA6J13A	GSMA6J13CA	LG	BG	14.4	15.9	1	13	21.5	28.0	1
GSMA6J14A	GSMA6J14CA	LK	BK	15.6	17.2	1	14	23.2	25.9	1
GSMA6J15A	GSMA6J15CA	LM	BM	16.7	18.5	1	15	24.4	24.6	1
GSMA6J16A	GSMA6J16CA	LP	BP	17.8	19.7	1	16	26.0	23.1	1
GSMA6J17A	GSMA6J17CA	LR	BR	18.9	20.9	1	17	27.6	21.8	1
GSMA6J18A	GSMA6J18CA	LT	BT	20.0	22.1	1	18	29.2	20.6	1
GSMA6J20A	GSMA6J20CA	LV	BV	22.2	24.5	1	20	32.4	18.6	1
GSMA6J22A	GSMA6J22CA	LX	BX	24.4	26.9	1	22	35.5	16.9	1
GSMA6J24A	GSMA6J24CA	LZ	BZ	26.7	29.5	1	24	38.9	15.5	1
GSMA6J26A	GSMA6J26CA	ME	CE	28.9	31.9	1	26	42.1	14.3	1
GSMA6J28A	GSMA6J28CA	MG	CG	31.1	34.4	1	28	45.4	13.3	1
GSMA6J30A	GSMA6J30CA	MK	CK	33.5	36.8	1	30	48.4	12.4	1
GSMA6J33A	GSMA6J33CA	MM	CM	36.7	40.6	1	33	53.3	11.3	1
GSMA6J36A	GSMA6J36CA	MP	CP	40.0	44.2	1	36	58.1	10.4	1
GSMA6J40A	GSMA6J40CA	MR	CR	44.4	49.1	1	40	64.5	9.3	1
GSMA6J43A	GSMA6J43CA	MT	CT	47.8	52.8	1	43	69.4	8.7	1
GSMA6J45A	GSMA6J45CA	MV	CV	50.0	55.3	1	45	72.7	8.3	1
GSMA6J48A	GSMA6J48CA	MX	CX	53.3	58.9	1	48	77.4	7.8	1
GSMA6J51A	GSMA6J51CA	MZ	CZ	56.7	62.7	1	51	82.4	7.3	1
GSMA6J54A	GSMA6J54CA	NE	DE	60.0	66.3	1	54	87.1	6.9	1
GSMA6J58A	GSMA6J58CA	NG	DG	64.4	71.2	1	58	93.6	6.5	1
GSMA6J60A	GSMA6J60CA	NK	DK	66.7	73.7	1	60	96.8	6.2	1
GSMA6J64A	GSMA6J64CA	NM	DM	71.1	78.6	1	64	103	5.9	1
GSMA6J70A	GSMA6J70CA	NP	DP	77.8	86.0	1	70	113	5.3	1
GSMA6J75A	GSMA6J75CA	NR	DR	83.3	92.1	1	75	121	5.0	1
GSMA6J78A	GSMA6J78CA	NT	DT	86.7	95.8	1	78	126	4.8	1
GSMA6J85A	GSMA6J85CA	NV	DV	94.4	104	1	85	137	4.4	1
GSMA6J90A	GSMA6J90CA	NX	DX	100	111	1	90	146	4.1	1
GSMA6J100A	GSMA6J100CA	NZ	DZ	111	123	1	100	162	3.7	1
GSMA6J110A	GSMA6J110CA	PE	EE	122	135	1	110	177	3.4	1
GSMA6J120A	GSMA6J120CA	PG	EG	133	147	1	120	193	3.1	1
GSMA6J130A	GSMA6J130CA	PK	EK	144	159	1	130	209	2.9	1
GSMA6J150A	GSMA6J150CA	PM	EM	167	185	1	150	243	2.5	1
GSMA6J160A	GSMA6J160CA	PP	EP	178	197	1	160	259	2.3	1
GSMA6J170A	GSMA6J170CA	PR	ER	189	209	1	170	275	2.2	1
GSMA6J180A	GSMA6J180CA	PT	ET	201	222	1	180	292	2.1	1
GSMA6J190A	GSMA6J190CA	PA	EC	209	243	1	190	308	2.0	1
GSMA6J200A	GSMA6J200CA	PV	EV	224	247	1	200	324	1.9	1
GSMA6J210A	GSMA6J210CA	PB	ED	231	268	1	210	340	1.8	1
GSMA6J220A	GSMA6J220CA	PX	EX	246	272	1	220	356	1.7	1
GSMA6J250A		PZ		279	309	1	250	405	1.5	1
GSMA6J300A		QE		335	371	1	300	486	1.3	1
GSMA6J350A		QG		391	432	1	350	567	1.1	1
GSMA6J400A		QK		447	494	1	400	648	0.9	1
GSMA6J440A		QM		492	543	1	440	713	0.9	1

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

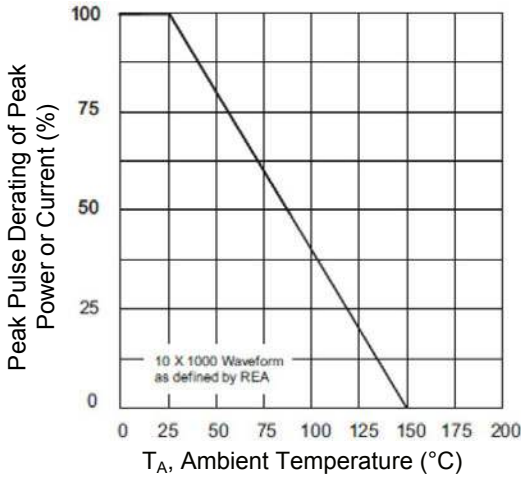


Figure 1. Pulse Derating Curve

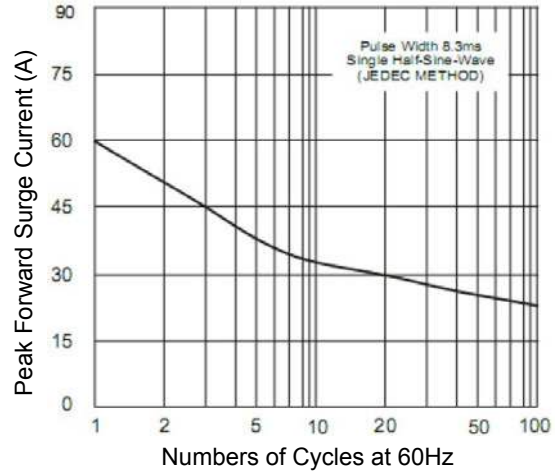


Figure 2. Maximum Non-Repetitive Surge Current

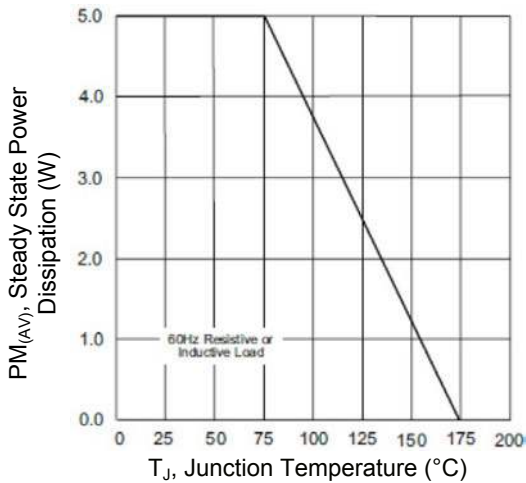


Figure 3. Steady State Power Derating Curve

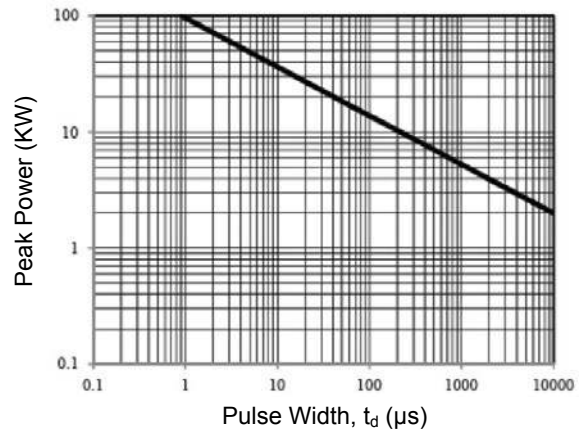


Figure 4. Peak Pulse Power Rating Curve

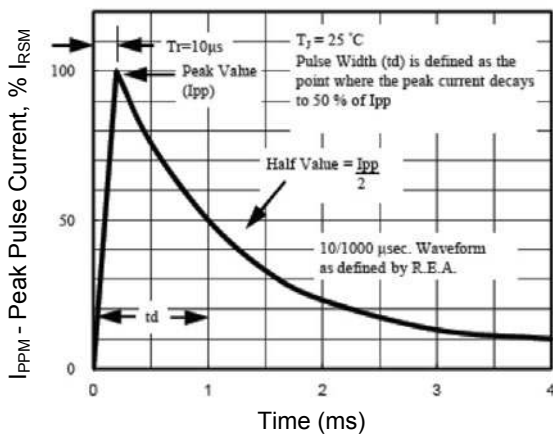


Figure 5. Pulse Waveform

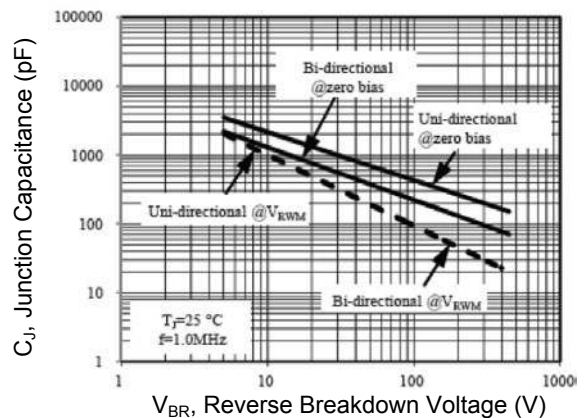
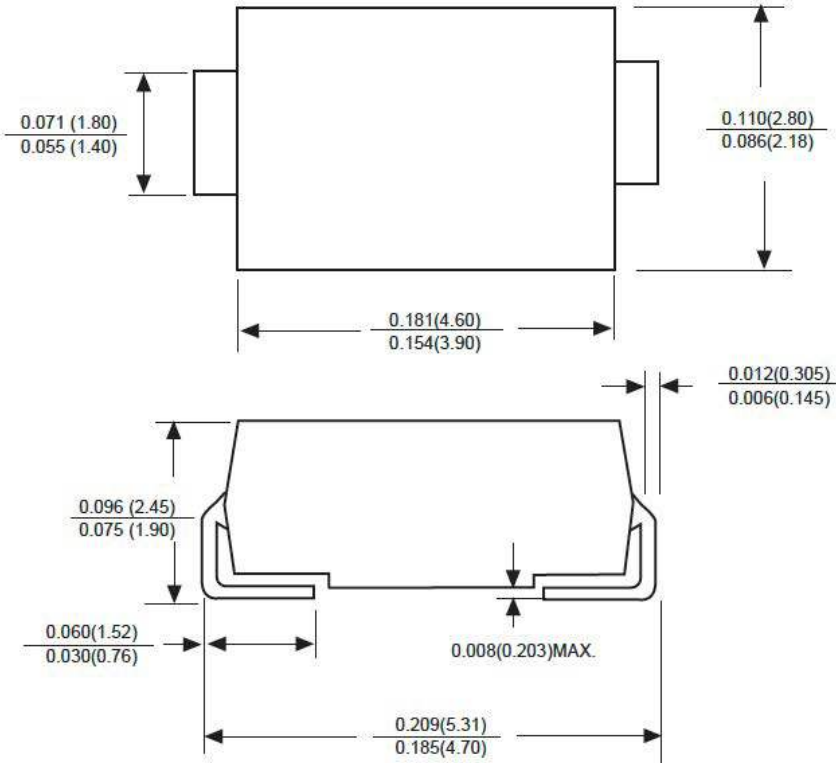


Figure 6. Typical Junction Capacitance

Package Outline Dimensions DO-214AC(SMA)



Dimensions in inches and (millimeters)