

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSORS

P6SMBJ SERIES

**DO-214AA (SMB)
Surface Mount Package**



ABSOLUTE MAXIMUM RATINGS

(Rating at 25°C ambient temperature unless specified otherwise. Resistive or Inductive load, 60Hz.

For Capacitive Load, Derate Current by 20%)

DESCRIPTION	SYMBOL	VALUE	UNIT
Peak Pulse Power Dissipation on 10/1000uS Wave form (Note1, 2)	P_{ppm}	600	W
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (Note 2, 3)	I_{FSM}	100	A
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to +150	°C

Note

1. Non-repetitive current pulse, and derated above $T_a=25^\circ\text{C}$

2. Mounted on 5.0mm² (0.13mm thick) land areas

3. Measured on 8.3ms, and single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum

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Device #		Reverse Stand off Voltage	Breakdown Voltage		Test Current	Reverse Leakage		Max. Clamp Voltage	Peak Pulse Current	Marking Code	
			V_{BR} at I_T			I_R at V_{RWM}				V_c at I_{PP}	I_{PP}
		V_{RWM}	Min	Max	I_T	UNI	BI				
UNI	BI	V	V	V	mA	mA	mA	V	A	UNI	BI
P6SMBJ5.0	P6SMBJ5.0C	5.0	6.40	7.55	10	800	1600	9.6	62.5	KD	AD
P6SMBJ5.0A	P6SMBJ5.0CA	5.0	6.40	7.25	10	800	1600	9.2	65.2	KE	AE
P6SMBJ6.0	P6SMBJ6.0C	6.0	6.67	8.45	10	800	1600	11.4	52.6	KF	AF
P6SMBJ6.0A	P6SMBJ6.0CA	6.0	6.67	7.67	10	800	1600	10.3	58.3	KG	AG
P6SMBJ6.5	P6SMBJ6.5C	6.5	7.22	9.14	10	500	1000	12.3	48.7	KH	AH
P6SMBJ6.5A	P6SMBJ6.5CA	6.5	7.22	8.30	10	500	1000	11.2	53.6	KK	AK
P6SMBJ7.0	P6SMBJ7.0C	7.0	7.78	9.86	10	200	400	13.3	45.1	KL	AL
P6SMBJ7.0A	P6SMBJ7.0CA	7.0	7.78	8.95	10	200	400	12.0	50.0	KM	AM
P6SMBJ7.5	P6SMBJ7.5C	7.5	8.33	10.67	1.0	100	200	14.3	42.0	KN	AN
P6SMBJ7.5A	P6SMBJ7.5CA	7.5	8.33	9.58	1.0	100	200	12.9	46.5	KP	AP
P6SMBJ8.0	P6SMBJ8.0C	8.0	8.89	11.30	1.0	50	100	15.0	40.0	KQ	AQ
P6SMBJ8.0A	P6SMBJ8.0CA	8.0	8.89	10.23	1.0	50	100	13.6	44.1	KR	AR
P6SMBJ8.5	P6SMBJ8.5C	8.5	9.44	11.92	1.0	10	20	15.9	37.7	KS	AS
P6SMBJ8.5A	P6SMBJ8.5CA	8.5	9.44	10.82	1.0	10	20	14.4	41.7	KT	AT
P6SMBJ9.0	P6SMBJ9.0C	9.0	10.00	12.60	1.0	5.0	5.0	16.9	35.5	KU	AU
P6SMBJ9.0A	P6SMBJ9.0CA	9.0	10.00	11.50	1.0	5.0	5.0	15.4	39.0	KV	AV
P6SMBJ10	P6SMBJ10C	10	11.10	14.10	1.0	5.0	5.0	18.8	31.9	KW	AW
P6SMBJ10A	P6SMBJ10CA	10	11.10	12.80	1.0	5.0	5.0	17.0	35.3	KX	AX



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			V _{BR} at I _T			I _R at V _{RWM}					
		V _{RWM}	Min	Max	I _T	UNI	BI	V _c at I _{PP}	I _{PP}	UNI	BI
UNI	BI	V	V	V	mA	mA	mA	V	A	UNI	BI
P6SMBJ11	P6SMBJ11C	11	12.20	15.40	1.0	5.0	5.0	20.1	29.9	KY	AY
P6SMBJ11A	P6SMBJ11CA	11	12.20	14.00	1.0	5.0	5.0	18.2	33.0	KZ	AZ
P6SMBJ12	P6SMBJ12C	12	13.30	16.90	1.0	5.0	5.0	22.0	27.3	LD	BD
P6SMBJ12A	P6SMBJ12CA	12	13.30	15.30	1.0	5.0	5.0	19.9	30.2	LE	BE
P6SMBJ13	P6SMBJ13C	13	14.40	18.20	1.0	1.0	1.0	23.8	25.2	LF	BF
P6SMBJ13A	P6SMBJ13CA	13	14.40	16.50	1.0	1.0	1.0	21.5	27.9	LG	BG
P6SMBJ14	P6SMBJ14C	14	15.60	19.80	1.0	1.0	1.0	25.8	23.3	LH	BH
P6SMBJ14A	P6SMBJ14CA	14	15.60	17.90	1.0	1.0	1.0	23.2	25.8	LK	BK
P6SMBJ15	P6SMBJ15C	15	16.70	21.10	1.0	1.0	1.0	26.9	22.3	LL	BL
P6SMBJ15A	P6SMBJ15CA	15	16.70	19.20	1.0	1.0	1.0	24.4	24.0	LM	BM
P6SMBJ16	P6SMBJ16C	16	17.80	22.60	1.0	1.0	1.0	28.8	20.8	LN	BN
P6SMBJ16A	P6SMBJ16CA	16	17.80	20.50	1.0	1.0	1.0	26.0	23.1	LP	BP
P6SMBJ17	P6SMBJ17C	17	18.90	23.90	1.0	1.0	1.0	30.5	19.7	LQ	BQ
P6SMBJ17A	P6SMBJ17CA	17	18.90	21.70	1.0	1.0	1.0	27.6	21.7	LR	BR
P6SMBJ18	P6SMBJ18C	18	20.00	25.30	1.0	1.0	1.0	32.2	18.6	LS	BS
P6SMBJ18A	P6SMBJ18CA	18	20.00	23.30	1.0	1.0	1.0	29.2	20.5	LT	BT
P6SMBJ20	P6SMBJ20C	20	22.20	28.10	1.0	1.0	1.0	35.8	16.7	LU	BU
P6SMBJ20A	P6SMBJ20CA	20	22.20	25.50	1.0	1.0	1.0	32.4	18.5	LV	BV
P6SMBJ22	P6SMBJ22C	22	24.40	30.90	1.0	1.0	1.0	39.4	15.2	LW	BW
P6SMBJ22A	P6SMBJ22CA	22	24.40	28.00	1.0	1.0	1.0	35.5	16.9	LX	BX
P6SMBJ24	P6SMBJ24C	24	26.70	33.80	1.0	1.0	1.0	43.0	14.0	LY	BY
P6SMBJ24A	P6SMBJ24CA	24	26.70	30.70	1.0	1.0	1.0	38.9	15.4	LZ	BZ
P6SMBJ26	P6SMBJ26C	26	28.90	36.60	1.0	1.0	1.0	46.6	12.4	MD	CD
P6SMBJ26A	P6SMBJ26CA	26	28.90	33.20	1.0	1.0	1.0	42.1	14.2	ME	CE
P6SMBJ28	P6SMBJ28C	28	31.10	39.40	1.0	1.0	1.0	50.0	12.0	MF	CF
P6SMBJ28A	P6SMBJ28CA	28	31.10	35.80	1.0	1.0	1.0	45.4	13.2	MG	CG
P6SMBJ30	P6SMBJ30C	30	33.30	42.20	1.0	1.0	1.0	53.5	11.2	MH	CH
P6SMBJ30A	P6SMBJ30CA	30	33.30	38.30	1.0	1.0	1.0	48.4	12.4	MK	CK
P6SMBJ33	P6SMBJ33C	33	36.70	46.50	1.0	1.0	1.0	59.0	10.2	ML	CL
P6SMBJ33A	P6SMBJ33CA	33	36.70	42.20	1.0	1.0	1.0	53.3	11.3	MM	CM
P6SMBJ36	P6SMBJ36C	36	40.00	50.70	1.0	1.0	1.0	64.3	9.3	MN	CN
P6SMBJ36A	P6SMBJ36CA	36	40.00	46.00	1.0	1.0	1.0	58.1	10.3	MP	CP
P6SMBJ40	P6SMBJ40C	40	44.40	56.30	1.0	1.0	1.0	71.4	8.4	MQ	CQ
P6SMBJ40A	P6SMBJ40CA	40	44.40	51.10	1.0	1.0	1.0	64.5	9.3	MR	CR
P6SMBJ43	P6SMBJ43C	43	47.80	60.50	1.0	1.0	1.0	76.7	7.8	MS	CS
P6SMBJ43A	P6SMBJ43CA	43	47.80	54.90	1.0	1.0	1.0	69.4	8.6	MT	CT
P6SMBJ45	P6SMBJ45C	45	50.00	63.30	1.0	1.0	1.0	80.3	7.5	MU	CU
P6SMBJ45A	P6SMBJ45CA	45	50.00	57.50	1.0	1.0	1.0	72.7	8.3	MV	CV
P6SMBJ48	P6SMBJ48C	48	53.30	67.50	1.0	1.0	1.0	85.5	7.0	MW	CW
P6SMBJ48A	P6SMBJ48CA	48	53.30	61.30	1.0	1.0	1.0	77.4	7.7	MX	CX
P6SMBJ51	P6SMBJ51C	51	56.70	71.80	1.0	1.0	1.0	91.1	6.6	MY	CY
P6SMBJ51A	P6SMBJ51CA	51	56.70	65.20	1.0	1.0	1.0	82.4	7.3	MZ	CZ



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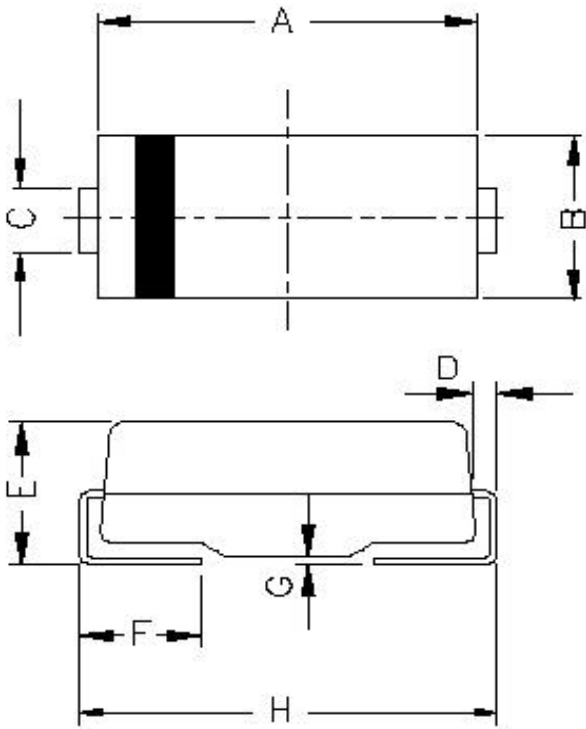
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			V _{BR} @ I _T			I _R @ V _{RWM}					
		V _{RWM}	Min	Max	I _T	UNI	BI	V _c @ I _{PP}	I _{PP}	UNI	BI
UNI	BI	V	V	V	mA	mA	mA	V	A		
P6SMBJ54	P6SMBJ54C	54	60.00	76.00	1.0	1.0	1.0	96.3	6.2	ND	DD
P6SMBJ54A	P6SMBJ54CA	54	60.00	69.00	1.0	1.0	1.0	87.1	6.9	NE	DE
P6SMBJ58	P6SMBJ58C	58	64.40	81.60	1.0	1.0	1.0	103	5.8	NF	DF
P6SMBJ58A	P6SMBJ58CA	58	64.40	74.10	1.0	1.0	1.0	93.6	6.4	NG	DG
P6SMBJ60	P6SMBJ60C	60	66.70	84.50	1.0	1.0	1.0	107	5.6	NH	DH
P6SMBJ60A	P6SMBJ60CA	60	66.70	76.70	1.0	1.0	1.0	96.8	6.2	NK	DK
P6SMBJ64	P6SMBJ64C	64	71.10	90.10	1.0	1.0	1.0	114	5.3	NL	DL
P6SMBJ64A	P6SMBJ64CA	64	71.10	81.80	1.0	1.0	1.0	103	5.8	NM	DM

P6SMBJ SERIES Rev160305E

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DO-214AA (SMB) Surface Mount Package



DIM	MIN.	MAX.
A	4.06	4.57
B	3.30	3.94
C	1.96	2.11
D	0.152	0.305
E	2.13	2.44
F	0.76	1.52
G	0.102	0.203
H	5.21	5.59

DIMENSIONS ARE IN mm

Packing:— 3K Per Reel

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