P6SMBJ Series — 600 Watt Surface Mount

P6SMBJ Series Features

- 600 watt peak pulse power dissipation
- Available in voltages from 5.0V to 170V
- Unidirectional and bidirectional
- Glass passivated junction
- Low clamping factor
- Available in tape and reel (Reel quantity = 3,000 pieces)
- Each device 100% surge tested
- Tape and Reel to EIA Standard RS-481-A
- UL 497B Recognized, File # E135015 (5.0V - 75V)

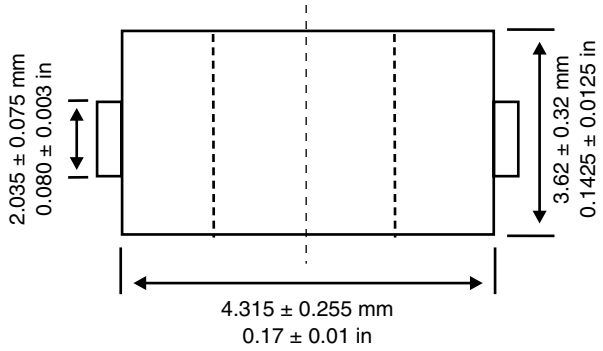
Absolute Maximum Ratings

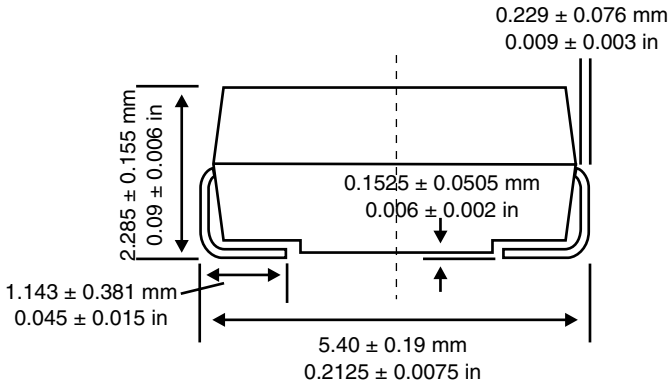
Parameter	Value
Peak pulse power dissipation (P_{PPM}) at 25°C	600W
Steady state power dissipation at 25°C	5W
Operating and storage temperatures	-55°C to + 150°C

Mechanical Characteristics

- DO214AA package
- UL94V-0 Thermoset Epoxy
- Solder plated terminals
- Solderable per MIL-STD-750 Method 2026

Mechanical Dimensions





P6SMBJ Series — 600 Watt Surface Mount

Electrical Characteristics

Part Number*	Uni Part Marking	Bi Part Marking	Rated Standoff Voltage V_{WM}	Breakdown Voltage		Maximum Stand By Current @V_{WM+} I_D	10/1000µs Maximum Clamping Voltage @$I_{PPM\#}$ V_C Max	10/1000µs Rated Peak Impulse Current $I_{PPM\#}$
				V_{BR} Min	@I_T			
			(Volts)	(Volts)	(mA)	(µA)	(Volts)	(Amperes)
P6SMBJ5.0	KD	AD	5.0	6.40	10	800.0	9.6	62.5
P6SMBJ5.0A	KE	AE	5.0	6.40	10	800.0	9.2	65.2
P6SMBJ6.0	KF	AF	6.0	6.67	10	800.0	11.4	52.6
P6SMBJ6.0A	KG	AG	6.0	6.67	10	800.0	10.3	58.3
P6SMBJ6.5	KH	AH	6.5	7.22	10	500.0	12.3	48.7
P6SMBJ6.5A	KK	AK	6.5	7.22	10	500.0	11.2	53.6
P6SMBJ7.0	KL	AL	7.0	7.78	10	200.0	13.3	45.1
P6SMBJ7.0A	KM	AM	7.0	7.78	10	200.0	12.0	50.0
P6SMBJ7.5	KN	AN	7.5	8.33	1	100.0	14.3	42.0
P6SMBJ7.5A	KP	AP	7.5	8.33	1	100.0	12.9	46.5
P6SMBJ8.0	KQ	AQ	8.0	8.89	1	50.0	15.0	40.0
P6SMBJ8.0A	KR	AR	8.0	8.89	1	50.0	13.6	44.1
P6SMBJ8.5	KS	AS	8.5	9.44	1	20.0	15.9	37.7
P6SMBJ8.5A	KT	AT	8.5	9.44	1	20.0	14.4	41.7
P6SMBJ9.0	KU	AU	9.0	10.00	1	10.0	16.9	35.5
P6SMBJ9.0A	KV	AV	9.0	10.00	1	10.0	15.4	39.0
P6SMBJ10	KW	AW	10.0	11.10	1	5.0	18.8	31.9
P6SMBJ10A	KX	AX	10.0	11.10	1	5.0	17.0	35.3
P6SMBJ11	KY	AY	11.0	12.20	1	5.0	20.1	29.9
P6SMBJ11A	KZ	AZ	11.0	12.20	1	5.0	18.2	33.0
P6SMBJ12	LD	BD	12.0	13.30	1	5.0	22.0	27.3
P6SMBJ12A	LE	BE	12.0	13.30	1	5.0	19.9	30.2
P6SMBJ13	LF	BF	13.0	14.40	1	5.0	23.8	25.2
P6SMBJ13A	LG	BG	13.0	14.40	1	5.0	21.5	27.9
P6SMBJ14	LH	BH	14.0	15.60	1	5.0	25.8	23.3
P6SMBJ14A	LK	BK	14.0	15.60	1	5.0	23.2	25.8

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+ = For Bidirectional Types Having V_{WM} <= 10V, their I_D limit is doubled.
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For Pb-Free add suffix – “F”

P6SMBJ Series — 600 Watt Surface Mount

Electrical Characteristics (continued)

Part Number*	Uni Part Marking	Bi Part Marking	Rated Standoff Voltage V_{WM}	Breakdown Voltage		Maximum Stand By Current @V_{WM+} I_D	10/1000µs Maximum Clamping Voltage @$I_{PPM\#}$ V_C Max	10/1000µs Rated Peak Impulse Current $I_{PPM\#}$
				V_{BR} Min	@I_T			
			(Volts)	(Volts)	(mA)	(µA)	(Volts)	(Amperes)
P6SMBJ15	LL	BL	15.0	16.70	1	5.0	26.9	22.3
P6SMBJ15A	LM	BM	15.0	16.70	1	5.0	24.4	24.0
P6SMBJ16	LN	BN	16.0	17.80	1	5.0	28.8	20.8
P6SMBJ16A	LP	BP	16.0	17.80	1	5.0	26.0	23.1
P6SMBJ17	LQ	BQ	17.0	18.90	1	5.0	30.5	19.7
P6SMBJ17A	LR	BR	17.0	18.90	1	5.0	27.6	21.7
P6SMBJ18	LS	BS	18.0	20.00	1	5.0	32.2	18.6
P6SMBJ18A	LT	BT	18.0	20.00	1	5.0	29.2	20.5
P6SMBJ20	LU	BU	20.0	22.20	1	5.0	35.8	16.7
P6SMBJ20A	LV	BV	20.0	22.20	1	5.0	32.4	18.5
P6SMBJ22	LW	BW	22.0	24.40	1	5.0	39.4	15.2
P6SMBJ22A	LX	BX	22.0	24.40	1	5.0	35.5	16.9
P6SMBJ24	LY	BY	24.0	26.70	1	5.0	43.0	14.0
P6SMBJ24A	LZ	BZ	24.0	26.70	1	5.0	38.9	15.4
P6SMBJ26	MD	CD	26.0	28.90	1	5.0	46.6	12.4
P6SMBJ26A	ME	CE	26.0	28.90	1	5.0	42.1	14.2
P6SMBJ28	MF	CF	28.0	31.10	1	5.0	50.0	12.0
P6SMBJ28A	MG	CG	28.0	31.10	1	5.0	45.4	13.2
P6SMBJ30	MH	CH	30.0	33.30	1	5.0	53.5	11.2
P6SMBJ30A	MK	CK	30.0	33.30	1	5.0	46.6	12.4
P6SMBJ33	ML	CL	33.0	36.70	1	5.0	59.0	10.2
P6SMBJ33A	MM	CM	33.0	36.70	1	5.0	53.3	11.3
P6SMBJ36	MN	CN	36.0	40.00	1	5.0	64.3	9.3
P6SMBJ36A	MP	CP	36.0	40.00	1	5.0	58.1	10.3
P6SMBJ40	MQ	CQ	40.0	44.40	1	5.0	71.4	8.4
P6SMBJ40A	MR	CR	40.0	44.40	1	5.0	64.5	9.3

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Electrical Characteristics (continued)

Part Number*	Uni Part Marking	Bi Part Marking	Rated Standoff Voltage V_{WM}	Breakdown Voltage		Maximum Stand By Current @V_{WM+} I_D	10/1000µs Maximum Clamping Voltage @$I_{PPM\#}$ V_C Max	10/1000µs Rated Peak Impulse Current $I_{PPM\#}$
				V_{BR} Min	@I_T			
			(Volts)	(Volts)	(mA)	(µA)	(Volts)	(Amperes)
P6SMBJ43	MS	CS	43.0	47.80	1	5.0	76.7	7.8
P6SMBJ43A	MT	CT	43.0	47.80	1	5.0	69.4	8.6
P6SMBJ45	MU	CU	45.0	50.00	1	5.0	80.3	7.5
P6SMBJ45A	MV	CV	45.0	50.00	1	5.0	72.7	8.3
P6SMBJ48	MW	CW	48.0	53.30	1	5.0	85.5	7.0
P6SMBJ48A	MX	CX	48.0	53.30	1	5.0	77.4	7.7
P6SMBJ51	MY	CY	51.0	56.70	1	5.0	91.1	6.6
P6SMBJ51A	MZ	CZ	51.0	56.70	1	5.0	82.4	7.3
P6SMBJ54	ND	DD	54.0	60.00	1	5.0	96.3	6.2
P6SMBJ54A	NE	DE	54.0	60.00	1	5.0	87.1	6.9
P6SMBJ58	NF	DF	58.0	64.40	1	5.0	103.0	5.8
P6SMBJ58A	NG	DG	58.0	64.40	1	5.0	93.6	6.4
P6SMBJ60	NH	DH	60.0	66.70	1	5.0	107.0	5.6
P6SMBJ60A	NK	DK	60.0	66.70	1	5.0	96.8	6.2
P6SMBJ64	NL	DL	64.0	71.10	1	5.0	114.0	5.3
P6SMBJ64A	NM	DM	64.0	71.10	1	5.0	103.0	5.8
P6SMBJ70	NN	DN	70.0	77.80	1	5.0	125.0	4.8
P6SMBJ70A	NP	DP	70.0	77.80	1	5.0	113.0	5.3
P6SMBJ75	NQ	DQ	75.0	83.30	1	5.0	134.0	4.5
P6SMBJ75A	NR	DR	75.0	83.30	1	5.0	121.0	4.9
P6SMBJ78	NS	DS	78.0	86.70	1	5.0	139.0	4.3
P6SMBJ78A	NT	DT	78.0	86.70	1	5.0	126.0	4.7
P6SMBJ85	NU	DU	85.0	94.40	1	5.0	151.0	3.9
P6SMBJ85A	NV	DV	85.0	94.40	1	5.0	137.0	4.4
P6SMBJ90	NW	DW	90.0	100.00	1	5.0	160.0	3.8
P6SMBJ90A	NX	DX	90.0	100.00	1	5.0	146.0	4.1

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				V_{BR} Min	@I_T			
			(Volts)	(Volts)	(mA)	(µA)	(Volts)	(Amperes)
P6SMBJ100	NY	DY	100.0	111.00	1	5.0	179.0	3.4
P6SMBJ100A	NZ	DZ	100.0	111.00	1	5.0	162.0	3.7
P6SMBJ110	PD	ED	110.0	122.00	1	5.0	196.0	3.0
P6SMBJ110A	PE	EE	110.0	122.00	1	5.0	177.0	3.4
P6SMBJ120	PF	EF	120.0	133.00	1	5.0	214.0	2.8
P6SMBJ120A	PG	EG	120.0	133.00	1	5.0	193.0	3.1
P6SMBJ130	PH	EH	130.0	144.00	1	5.0	231.0	2.6
P6SMBJ130A	PK	EK	130.0	144.00	1	5.0	209.0	2.9
P6SMBJ150	PL	EL	150.0	167.00	1	5.0	268.0	2.2
P6SMBJ150A	PM	EM	150.0	167.00	1	5.0	243.0	2.5
P6SMBJ160	PN	EN	160.0	178.00	1	5.0	287.0	2.1
P6SMBJ160A	PP	EP	160.0	178.00	1	5.0	259.0	2.3
P6SMBJ170	PQ	EQ	170.0	189.00	1	5.0	304.0	2.0
P6SMBJ170A	PR	ER	170.0	189.00	1	5.0	275.0	2.2

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