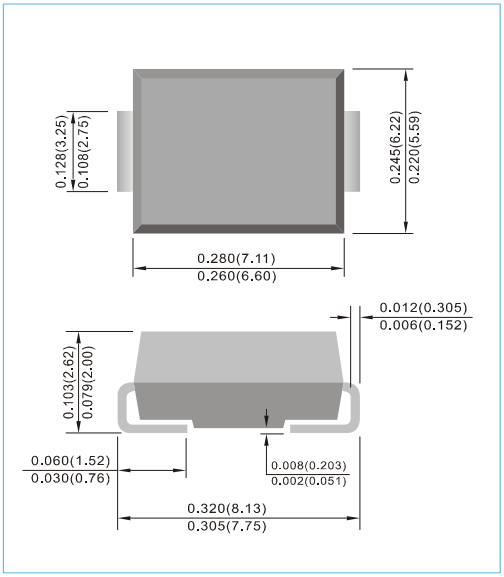
PANJIT SEMI CONDUCTOR

3.0SMCJ5.0~3.0SMCJ220CA

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR PEAK PULSE POWER 3000 Watt

STAND-OFF VOLTAGE | **5 to 220 Volt**

SMC / DO-214AB Unit : inch(mm)



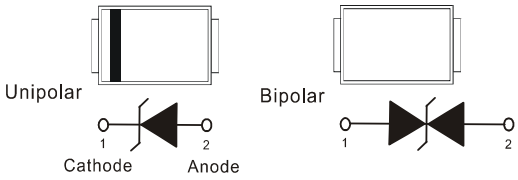
Recongnized File # E210467

FEATURES

- For surface mounted applications in order to optimize board space
- Low inductance
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- High temperature soldering : 260°C /10 seconds at terminals
- ESD IEC-61000-4-2 Air ± 30kV, Contact ± 30kV
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: JEDEC DO-214AB,Molded plastic over passivated junction.
- Terminals: Solder plated,solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard Packaging: 16mm tape (EIA-481)
- Weight: 0.008 ounce, 0.23 gram



DEVICES FOR BIPOLARAPPLICATIONS

For Bidirectional use C or CA Suffix for types 3.0SMCJ5.0 thru types 3.0SMCJ220.
Electrical characteristics apply in both directions.

MAXIMUM RATINGS AND CHARACTERISTICS

Rating at 25°Cambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.
For Capacitive load derate current by 20%.

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation on tp=10/1000μs waveform (Notes 1, Fig.1)	P_{PP}	3000	Watts
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (Notes 2)	I_{FSM}	200	Amps
Peak Pulse Current on tp=10/1000μs waveform (Notes 1) Fig.3	I_{PPM}	see Table 1	Amps
Typical Thermal Resistance Junction to Air	$R_{\theta JA}$	25	°C / W
ESD IEC-61000-4-2 (Air) ESD IEC-61000-4-2 (Contact)	V_{ESD}	±30 ±30	kV
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

NOTES :

1.Non-repetitive current pulse, per Fig. 3 and derated above T_A=25°C per Fig. 2.

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

3.A transient suppressor is selected according to the working peak reverse voltage (V_{RWM}), which should be equal to or greater than the DC or continuous peak operating voltage level.

PANJIT SEMI CONDUCTOR

3.0SMCJ5.0~3.0SMCJ220CA

Part Number		Reverse Stand-off Voltage	Breakdown Voltage		TestC urrent	Reverse Leakage		Max. Clamp Voltage 10/1000 μs	Peak Pulse Current 10/1000μs	Marking Code	
		V_{RWM} (Notes 3)	V_{BR} @ I_T		I_T	I_R @ V_{RWM}		V_C @ I_{PP}	I_{PP}		
			Min.	Max.		UNI	BI				
UNI	BI	V	V	V	mA	μA	μA	V	A	UNI	BI
3000W Transient Voltage Suppressor											
3.0SMCJ5.0	3.0SMCJ5.0C	5	6.4	7.55	10	1000	2000	9.6	312.5	HDD	IDD
3.0SMCJ5.0A	3.0SMCJ5.0CA	5	6.4	7.25	10	1000	2000	9.2	326	HDE	IDE
3.0SMCJ6.0	3.0SMCJ6.0C	6	6.67	8.45	10	1000	2000	11.4	263.2	HDF	IDF
3.0SMCJ6.0A	3.0SMCJ6.0CA	6	6.67	7.67	10	1000	2000	10.3	291.3	HDG	IDG
3.0SMCJ6.5	3.0SMCJ6.5C	6.5	7.22	9.14	10	500	1000	12.3	243.9	HDH	IDH
3.0SMCJ6.5A	3.0SMCJ6.5CA	6.5	7.22	8.3	10	500	1000	11.2	267.9	HDK	IDK
3.0SMCJ7.0	3.0SMCJ7.0C	7	7.78	9.86	10	200	400	13.3	225.6	HDL	IDL
3.0SMCJ7.0A	3.0SMCJ7.0CA	7	7.78	8.95	10	200	400	12	250	HDM	IDM
3.0SMCJ7.5	3.0SMCJ7.5C	7.5	8.33	10.67	1	100	200	14.3	209.8	HDN	IDN
3.0SMCJ7.5A	3.0SMCJ7.5CA	7.5	8.33	9.6	1	100	200	12.9	232.6	HDP	IDP
3.0SMCJ8.0	3.0SMCJ8.0C	8	8.89	11.3	1	50	100	15.00	200	HDQ	IDQ
3.0SMCJ8.0A	3.0SMCJ8.0CA	8	8.89	10.23	1	50	100	13.6	220.6	HDR	IDR
3.0SMCJ8.5	3.0SMCJ8.5C	8.5	9.44	11.92	1	25	50	15.9	188.8	HDS	IDS
3.0SMCJ8.5A	3.0SMCJ8.5CA	8.5	9.44	10.82	1	25	50	14.4	208.4	HDT	IDT
3.0SMCJ9.0	3.0SMCJ9.0C	9	10	12.6	1	10	20	16.9	177.4	HDU	IDU
3.0SMCJ9.0A	3.0SMCJ9.0CA	9	10	11.5	1	10	20	15.4	194.8	HDV	IDV
3.0SMCJ10	3.0SMCJ10C	10	11.1	14.1	1	3	3	18.8	159.6	HDW	IDW
3.0SMCJ10A	3.0SMCJ10CA	10	11.1	12.8	1	3	3	17	176.4	HDX	IDX
3.0SMCJ11	3.0SMCJ11C	11	12.2	15.4	1	3	3	20.1	149.2	HDY	IDY
3.0SMCJ11A	3.0SMCJ11CA	11	12.2	14	1	3	3	18.2	184.8	HDZ	IDZ
3.0SMCJ12	3.0SMCJ12C	12	13.3	16.9	1	3	3	22	136.4	HED	IED
3.0SMCJ12A	3.0SMCJ12CA	12	13.3	15.3	1	3	3	19.9	150.6	HEE	IEE
3.0SMCJ13	3.0SMCJ13C	13	14.4	18.2	1	3	3	23.8	126	HEF	IEF
3.0SMCJ13A	3.0SMCJ13CA	13	14.4	16.5	1	3	3	21.5	139.4	HEG	IEG
3.0SMCJ14	3.0SMCJ14C	14	15.6	19.8	1	3	3	25.8	116.2	HEH	IEH
3.0SMCJ14A	3.0SMCJ14CA	14	15.6	17.9	1	3	3	23.2	129.4	HEK	IEK
3.0SMCJ15	3.0SMCJ15C	15	16.7	21.1	1	3	3	26.9	111.6	HEL	IEL
3.0SMCJ15A	3.0SMCJ15CA	15	16.7	19.2	1	3	3	24.4	123	HEM	IEM
3.0SMCJ16	3.0SMCJ16C	16	17.8	22.6	1	3	3	28.8	104.2	HEN	IEN
3.0SMCJ16A	3.0SMCJ16CA	16	17.8	20.5	1	3	3	26	115.4	HEP	IEP
3.0SMCJ17	3.0SMCJ17C	17	18.9	23.9	1	3	3	30.5	98.4	HEQ	IEQ
3.0SMCJ17A	3.0SMCJ17CA	17	18.9	21.7	1	3	3	27.6	106.6	HER	IER
3.0SMCJ18	3.0SMCJ18C	18	20	25.3	1	3	3	32.2	93.2	HES	IES
3.0SMCJ18A	3.0SMCJ18CA	18	20	23.3	1	3	3	29.2	102.8	HET	IET
3.0SMCJ20	3.0SMCJ20C	20	22.2	28.1	1	3	3	35.8	83.8	HEU	IEU
3.0SMCJ20A	3.0SMCJ20CA	20	22.2	25.5	1	3	3	32.4	92.6	HEV	IEV
3.0SMCJ22	3.0SMCJ22C	22	24.4	30.9	1	3	3	39.4	76.2	HEW	IEW
3.0SMCJ22A	3.0SMCJ22CA	22	24.4	28	1	3	3	35.5	84.4	HEX	IEX
3.0SMCJ24	3.0SMCJ24C	24	26.7	33.8	1	3	3	43	69.8	HEY	IEY
3.0SMCJ24A	3.0SMCJ24CA	24	26.7	30.7	1	3	3	38.9	77.2	HEZ	IEZ
3.0SMCJ26	3.0SMCJ26C	26	28.9	36.6	1	3	3	46.6	64.4	HFD	IFD
3.0SMCJ26A	3.0SMCJ26CA	26	28.9	33.2	1	3	3	42.1	71.2	HFE	IFE
3.0SMCJ28	3.0SMCJ28C	28	31.1	39.4	1	3	3	50	60	HFF	IFF
3.0SMCJ28A	3.0SMCJ28CA	28	31.1	35.8	1	3	3	45.4	66	HFG	IFG
3.0SMCJ30	3.0SMCJ30C	30	33.3	42.2	1	3	3	53.5	56	HFH	IFH
3.0SMCJ30A	3.0SMCJ30CA	30	33.3	38.3	1	3	3	48.4	62	HFK	IFK
3.0SMCJ33	3.0SMCJ33C	33	36.7	46.5	1	3	3	59	50.4	HFL	IFL
3.0SMCJ33A	3.0SMCJ33CA	33	36.7	42.2	1	3	3	53.3	56.2	HFM	IFM
3.0SMCJ36	3.0SMCJ36C	36	40	50.7	1	3	3	64.3	46.6	HFN	IFN
3.0SMCJ36A	3.0SMCJ36CA	36	40	46	1	3	3	58.1	51.6	HFP	IFP
3.0SMCJ40	3.0SMCJ40C	40	44.4	56.3	1	3	3	71.4	42	HFQ	IFQ
3.0SMCJ40A	3.0SMCJ40CA	40	44.4	51.1	1	3	3	64.5	46.4	HFR	IFR
3.0SMCJ43	3.0SMCJ43C	43	47.8	60.5	1	3	3	76.7	39.2	HFS	IFS

3.0SMCJ5.0~3.0SMCJ220CA

Part Number		Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage		Max. Clamp Voltage 10/1000 μs	Peak Pulse Current 10/1000μs	Marking Code	
		V_{RWM} (Notes 3)	V_{BR} @ I_T		I_T	I_R @ V_{RWM}		V_C @ I_{PP}	I_{PP}		
			Min.	Max.		UNI	BI				
UNI	BI	V	V	V	mA	μA	μA	V	A	UNI	BI
3000W Transient Voltage Suppressor											
3.0SMCJ43A	3.0SMCJ43CA	43	47.8	54.9	1	3	3	69.4	43.2	HFT	IFT
3.0SMCJ45	3.0SMCJ45C	45	50	63.3	1	3	3	80.3	37.4	HFU	IFU
3.0SMCJ45A	3.0SMCJ45CA	45	50	57.5	1	3	3	72.7	41.2	HFV	IFV
3.0SMCJ48	3.0SMCJ48C	48	53.3	67.5	1	3	3	85.5	35	HFW	IFW
3.0SMCJ48A	3.0SMCJ48CA	48	53.3	61.3	1	3	3	77.4	38.8	HFX	IFX
3.0SMCJ51	3.0SMCJ51C	51	56.7	71.8	1	3	3	91.1	37	HFY	IFY
3.0SMCJ51A	3.0SMCJ51CA	51	56.7	65.2	1	3	3	82.4	36.4	HFZ	IFZ
3.0SMCJ54	3.0SMCJ54C	54	60	76	1	3	3	96.3	31.2	HGD	IGD
3.0SMCJ54A	3.0SMCJ54CA	54	60	69	1	3	3	87.1	34.4	HGE	IGE
3.0SMCJ58	3.0SMCJ58C	58	64.4	81.6	1	3	3	103	39.2	HGF	IGF
3.0SMCJ58A	3.0SMCJ58CA	58	64.4	74.1	1	3	3	93.6	32	HGG	IGG
3.0SMCJ60	3.0SMCJ60C	60	66.7	84.5	1	3	3	107	28	HGH	IGH
3.0SMCJ60A	3.0SMCJ60CA	60	66.7	76.7	1	3	3	96.8	31	HGK	IGK
3.0SMCJ64	3.0SMCJ64C	64	71.1	90.1	1	3	3	114	26.4	HGL	IGL
3.0SMCJ64A	3.0SMCJ64CA	64	71.1	81.8	1	3	3	103	29.2	HGM	IGM
3.0SMCJ70	3.0SMCJ70C	70	77.8	98.6	1	3	3	125	24	HGN	IGN
3.0SMCJ70A	3.0SMCJ70CA	70	77.8	89.5	1	3	3	113	26.6	HGP	IGP
3.0SMCJ75	3.0SMCJ75C	75	83.3	105.7	1	3	3	134	22.4	HGQ	IGQ
3.0SMCJ75A	3.0SMCJ75CA	75	83.3	95.8	1	3	3	121	24.8	HGR	IGR
3.0SMCJ78	3.0SMCJ78C	78	86.7	109.8	1	3	3	139	21.6	HGS	IGS
3.0SMCJ78A	3.0SMCJ78CA	78	86.7	99.7	1	3	3	126	22.8	HGT	IGT
3.0SMCJ85	3.0SMCJ85C	85	94.4	119.2	1	3	3	151	19.8	HGU	IGU
3.0SMCJ85A	3.0SMCJ85CA	85	94.4	108.2	1	3	3	137	20.8	HGV	IGV
3.0SMCJ90	3.0SMCJ90C	90	100	126.5	1	3	3	160	18.8	HGW	IGW
3.0SMCJ90A	3.0SMCJ90CA	90	100	115.5	1	3	3	146	20.6	HGX	IGX
3.0SMCJ100	3.0SMCJ100C	100	111	141	1	3	3	179	16.6	HGY	IGY
3.0SMCJ100A	3.0SMCJ100CA	100	111	128	1	3	3	162	18.6	HGZ	IGZ
3.0SMCJ110	3.0SMCJ110C	110	122	154.5	1	3	3	196	15.4	HHD	IHD
3.0SMCJ110A	3.0SMCJ110CA	110	122	140.5	1	3	3	177	16.8	HHE	IHE
3.0SMCJ120	3.0SMCJ120C	120	133	169	1	3	3	214	14	HHF	IHF
3.0SMCJ120A	3.0SMCJ120CA	120	133	153	1	3	3	193	15.6	HHG	IHG
3.0SMCJ130	3.0SMCJ130C	130	144	182.5	1	3	3	231	13	HHH	IHH
3.0SMCJ130A	3.0SMCJ130CA	130	144	165.5	1	3	3	209	14.4	HHK	IHK
3.0SMCJ150	3.0SMCJ150C	150	167	211.5	1	3	3	268	11.2	HHL	IHL
3.0SMCJ150A	3.0SMCJ150CA	150	167	192.5	1	3	3	243	12.4	HHM	IHM
3.0SMCJ160	3.0SMCJ160C	160	178	226	1	3	3	287	10.4	HHN	IHN
3.0SMCJ160A	3.0SMCJ160CA	160	178	205	1	3	3	259	11.6	HHP	IHP
3.0SMCJ170	3.0SMCJ170C	170	189	239.5	1	3	3	304	9.8	HHQ	IHQ
3.0SMCJ170A	3.0SMCJ170CA	170	189	217.5	1	3	3	275	11	HHR	IHR
3.0SMCJ180	3.0SMCJ180C	180	198	253.8	1	3	3	322	9.3	HHS	IHS
3.0SMCJ180A	3.0SMCJ180CA	180	198	230.4	1	3	3	292	10.3	HHT	IHT
3.0SMCJ190	3.0SMCJ190C	190	209	267.9	1	3	3	340	8.8	HHU	IHU
3.0SMCJ190A	3.0SMCJ190CA	190	209	243.2	1	3	3	308	9.7	HHV	IHV
3.0SMCJ200	3.0SMCJ200C	200	220	282	1	3	3	358	8.4	HHW	IHW
3.0SMCJ200A	3.0SMCJ200CA	200	220	256	1	3	3	324	9.3	HHX	IHX
3.0SMCJ210	3.0SMCJ210C	210	231	296.1	1	3	3	376	7.8	HHY	IHY
3.0SMCJ210A	3.0SMCJ210CA	210	231	268.8	1	3	3	340	8.8	HHZ	IHZ
3.0SMCJ220	3.0SMCJ220C	220	242	310.2	1	3	3	394	7.6	HID	IID
3.0SMCJ220A	3.0SMCJ220CA	220	242	281.6	1	3	3	356	8.4	HIE	IIE

3.0SMCJ5.0~3.0SMCJ220CA

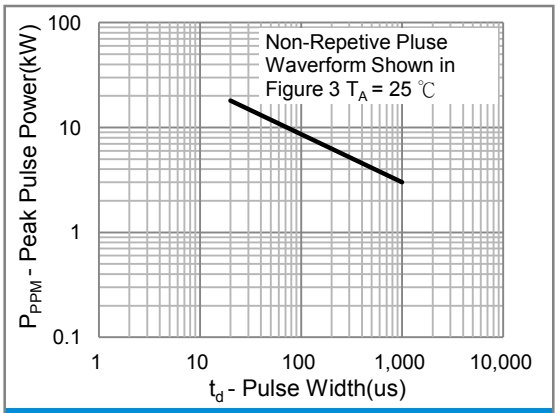


Fig.1 Peak Pulse Power Rating

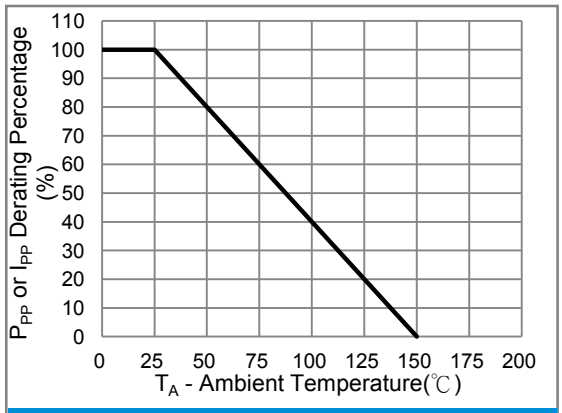


Fig.2 Derating Curve

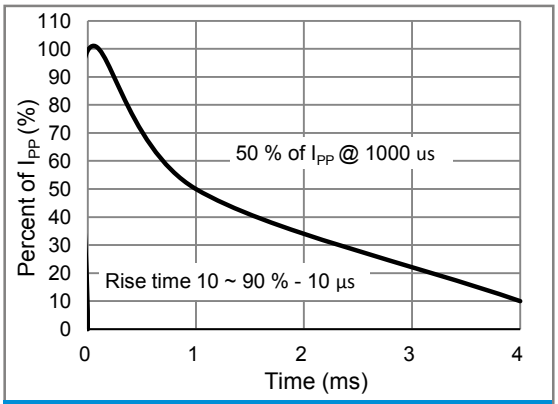


Fig.3 10/1000us Pulse Waveform

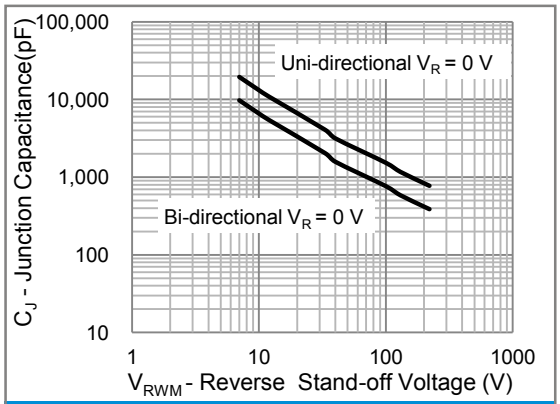
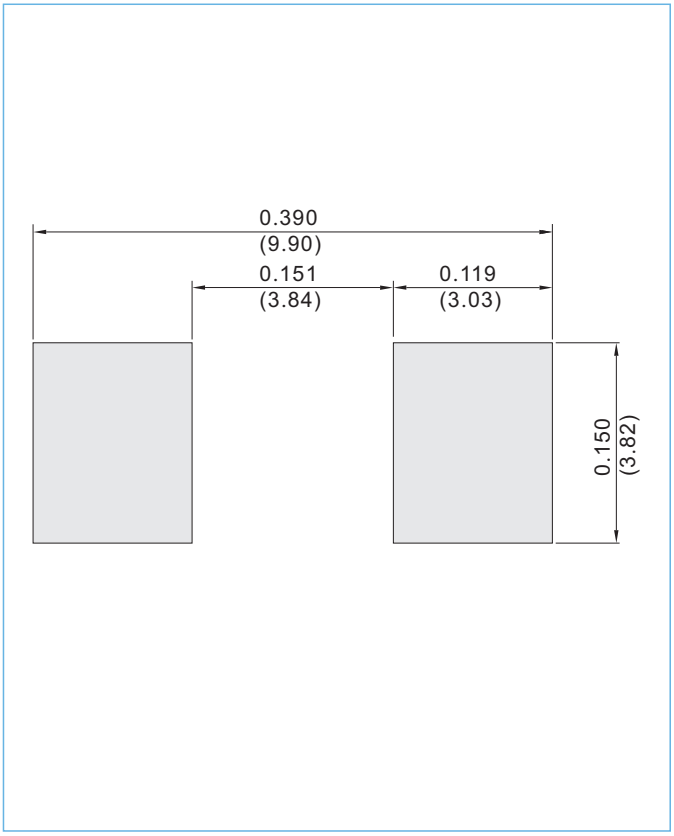


Fig.4 Typical Capacitance

3.0SMCJ5.0~3.0SMCJ220CA

MOUNTING PAD LAYOUT

SMC / DO-214AB Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 3K per 13" plastic Reel

  T/R - 0.8K per 7" plastic Reel

3.0SMCJ5.0~3.0SMCJ220CA

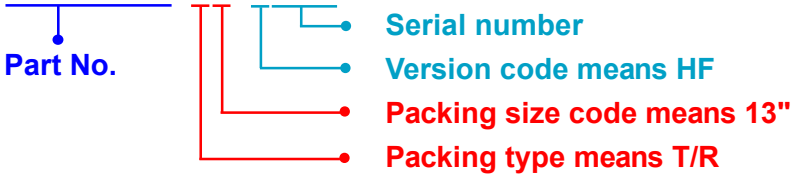
Part No_packing code_Version

3.0SMCJ5.0A_R1_00001

3.0SMCJ5.0A_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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Unikeyic Electronics

Global Electronic Components Distributor

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PANJIT:

BZT52B12S_R1_00001 ER2004CT_TO_00001 MMSZ5242B_R1_00001 S3JA_R2_00001 BZT52-B27S
S1G_R2_00001 BZT52-B8V2S_R1_00001 GS1010FL-LE_R1_00001 SB34AFC_R1_00001 S100_R1_00001
BAV70_R1_00101 BAV99_R1_00001 MMSZ5245AS_R1_00001 MMSZ5248B_R1_00001
P4FL6.5A_R1_00001 P6SMB75A_R3_00001 P6SMBJ10A_R1_00001 ER2D_R2_00001
P4SMAJ180A_R1_00001 PSDH6060CCS1_T0_00001 BAT750_R1_00001 GS1M_R1_10001
SS20100FL_R1_00001 UF808_T0_00001 BSS8402DW_R1_00001 PJSD24TS-AU_R1_000A1
SB34AFC-AU_R1_000A1 ZMM55-C43_R1_10001 SB36AFC-AU_R1_000A1 PSDB1560L1_T0_00001