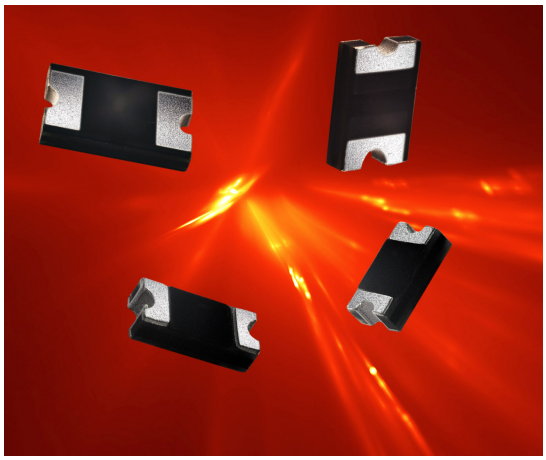
Schottky Barrier Rectifier Diode

Lead-less Chip Form

GENERAL DESCRIPTION

AVX Schottky rectifier diodes offer unique lead-less chip packaging technology which eliminates the lead frame wire bond to give the chip top-bottom symmetry for fewer mounting problems, better heat transfer, and current handling capability (compared to SOD devices).



FEATURES

- Lead-less chip form
- Low Vf
- High current capability
- Low power loss/high efficiency
- UL 94V-0 class package material
- Halogen free

APPLICATIONS

- Switch mode power supplies
- High frequency rectification
- Portable battery powered devices
- Reverse bias protection

MECHANICAL DATA

Case: FRP substrate with epoxy underfill

Terminations: 100% Sn plated (Pb-free), solderable per MIL-STD-750, Method 2026.

Operating Temperature: -55°C to 125°C

Storage Temperature: -55°C to 150°C

HOW TO ORDER

SD	3220	S	020	S	3R0
Series	**Size**	**Thickness**	**Voltage**	**Vf**	**Current**
Schottky Diodes	3220 2114 2010 0805 0603	S = Standard T = Thin	020 = 20V 030 = 30V 040 = 40V 060 = 60V 100 = 100V 150 = 150V 200 = 200V	S = Standard L = Low	0R1 = 0.1 0R2 = 0.2 0R3 = 0.3 0R5 = 0.5 1R0 = 1.0

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

RoHS COMPLIANT

AVX SCHOTTKY DIODE CURRENTS BY CASE SIZE

Size		Max Forward Current								
EIAJ	**JEDEC**	**.1A**	**.2A**	**.3A**	**.5A**	**1A**	**2A**	**3A**	**5A**	**8A**
0603	SOD-523	●	●	●						
0805	SOD-323	●	●	●	●	●				
1206	SOD-123				●	●	●	●		
2010	SMA (D0-214AC)					●	●	●	●	
2114	SMB (D0-214AA)							●	●	●
3220	SMC (D0-214AB)							●	●	

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ELECTRICAL CHARACTERISTICS

AVX PN	Size	Max Reverse Voltage	Max Forward Current	Max Peak Forward Surge Current	Reverse Current I_{RRM}		Forward Voltage Vf			Rth JA	Rth JL	Cj
		V_{RRM}	I_F	I_{FSM}	Typ	Max	I_F	Min	Max			
		V	A	A	mA	mA	A	V	V	°C/W	°C/W	pF
SD3220S020S3R0	3220	20	3	100	0.025	0.5	3	0.47	0.50	55	17	180
SD3220S040S3R0	3220	40	3	100	0.025	0.5	3	0.47	0.50	55	17	180
SD3220S060S3R0	3220	60	3	100	0.025	0.5	3	0.65	0.70	55	17	180
SD3220S100S3R0	3220	100	3	100	0.025	0.5	3	0.78	0.85	55	17	180
SD3220S020S5R0	3220	20	5	130	0.045	0.5	5	0.52	0.55	55	17	180
SD3220S040S5R0	3220	40	5	130	0.045	0.5	5	0.52	0.55	55	17	180
SD3220S060S5R0	3220	60	5	130	0.045	0.5	5	0.65	0.70	55	17	180
SD3220S100S5R0	3220	100	5	130	0.045	0.5	5	0.79	0.85	55	17	180
SD2114S020S3R0	2114	20	3	80	0.04	0.5	3	0.48	0.50	55	17	180
SD2114S040S3R0	2114	40	3	80	0.04	0.5	3	0.48	0.50	55	17	180
SD2114S060S3R0	2114	60	3	80	0.04	0.5	3	0.65	0.70	55	17	180
SD2114S100S3R0	2114	100	3	80	0.04	0.5	3	0.78	0.85	55	17	180
SD2114S020S5R0	2114	20	5	105	0.045	0.5	5	0.5	0.55	55	17	250
SD2114S040S5R0	2114	40	5	105	0.045	0.5	5	0.5	0.55	55	17	250
SD2114S060S5R0	2114	60	5	105	0.045	0.5	5	0.65	0.70	55	17	250
SD2114S100S5R0	2114	100	5	105	0.045	0.5	5	0.79	0.85	55	17	250
SD2114S040S8R0	2114	40	8	135	0.045	0.5	8	0.53	0.55	55	17	450
SD2010S020S1R0	2010	20	1	30	0.02	0.2	1	0.47	0.50	88	28	110
SD2010S040S1R0	2010	40	1	30	0.02	0.2	1	0.47	0.50	88	28	110
SD2010S060S1R0	2010	60	1	30	0.02	0.2	1	0.6	0.70	88	28	110
SD2010S100S1R0	2010	100	1	30	0.02	0.2	1	0.76	0.85	88	28	110
SD2010S150S1R0	2010	150	1	30	0.001	0.05	1	0.83	0.88	88	28	110
SD2010S200S1R0	2010	200	1	30	0.001	0.05	1	0.86	0.90	88	28	110
SD2010S020S2R0	2010	20	2	50	0.025	0.2	2	0.49	0.50	75	17	115
SD2010S040S2R0	2010	40	2	50	0.025	0.2	2	0.49	0.50	75	17	115
SD2010S060S2R0	2010	60	2	50	0.025	0.2	2	0.6	0.70	75	17	115
SD2010S100S2R0	2010	100	2	50	0.025	0.2	2	0.75	0.85	75	17	115
SD2010S150S2R0	2010	150	2	50	0.001	0.2	2	0.83	0.88	88	28	110
SD2010S200S2R0	2010	200	2	50	0.001	0.2	2	0.86	0.90	88	28	110
SD2010S020S3R0	2010	20	3	80	0.02	0.2	3	0.46	0.50	86	24	120
SD2010S040S3R0	2010	40	3	80	0.02	0.2	3	0.46	0.50	86	24	120
SD2010S060S3R0	2010	60	3	80	0.02	0.2	3	0.58	0.70	86	24	120
SD2010S100S3R0	2010	100	3	80	0.02	0.2	3	0.75	0.85	86	24	120
SD2010S150S3R0	2010	150	3	80	0.001	0.05	3	0.83	0.88	88	28	110
SD2010S200S3R0	2010	200	3	80	0.001	0.05	3	0.86	0.90	88	28	110
SD2010S030S5R0	2010	30	5	80		0.2	3	0.42	0.44	55	17	210
SD2010S020L1R0	2010	20	1	30	0.35	1.0	1	0.37	0.38	55	17	115
SD2010S040L1R0	2010	40	1	30	0.35	1.0	1	0.37	0.38	55	17	115
SD2010S020L2R0	2010	20	2	50	0.28	1.0	2	0.39	0.40	70	17	115
SD2010S040L2R0	2010	40	2	50	0.28	1.0	2	0.39	0.40	70	17	115
SD2010S020L3R0	2010	20	3	80	0.55	1.0	3	0.39	0.42	55	17	120
SD2010S040L3R0	2010	40	3	80	0.55	1.0	3	0.39	0.42	55	17	120
SD2010S030L3R0	2010	30	3	70	0.08	0.2	3	0.42	0.44	55	17	120
SD1206S020S0R5	1206	20	0.5	15	0.01	0.05	0.5	0.4	0.42	88	28	120
SD1206S040S0R5	1206	40	0.5	15	0.01	0.05	0.5	0.45	0.48	88	28	120
SD1206S020S1R0	1206	20	1.0	20	0.015	0.2	1.0	0.46	0.50	88	28	110
SD1206S040S1R0	1206	40	1.0	20	0.015	0.2	1.0	0.46	0.50	88	28	110
SD1206S060S1R0	1206	60	1.0	20	0.015	0.2	1.0	0.62	0.70	88	28	110
SD1206S100S1R0	1206	100	1.0	20	0.015	0.2	1.0	0.76	0.85	88	28	110
SD1206S020S2R0	1206	20	2.0	40	0.03	0.2	2.0	0.47	0.50	75	17	115
SD1206S040S2R0	1206	40	2.0	40	0.03	0.2	2.0	0.47	0.50	75	17	115
SD1206S060S2R0	1206	60	2.0	40	0.03	0.2	2.0	0.58	0.70	75	17	115
SD1206S100S2R0	1206	100	2.0	40	0.03	0.2	2.0	0.75	0.85	75	17	115
SD1206S020L1R0	1206	20	1.0	25	0.3	1.0	1.0	0.37	0.38	88	28	115
SD1206S040L1R0	1206	40	1.0	25	0.3	1.0	1.0	0.37	0.38	88	28	115
SD1206S020L2R0	1206	20	2.0	40	0.28	1.0	2.0	0.39	0.40	70	22	115

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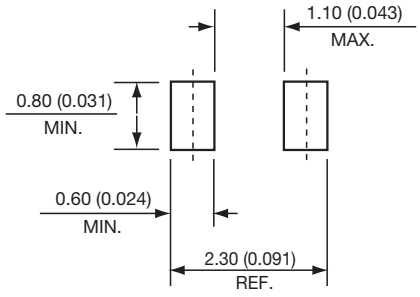
AVX PN	Size	Max Reverse Voltage	Max Forward Current	Max Peak Forward Surge Current	Reverse Current I_{RRM}		Forward Voltage Vf			Rth JA	Rth JL	Cj
		V_{RRM}	I_F	I_{FSM}	Typ	Max	I_F	Min	Max			
		V	A	A	mA	mA	A	V	V	°C/W	°C/W	pF
SD1206S040L2R0	1206	40	2.0	40	0.28	1.0	2.0	0.39	0.40	70	22	115
SD1206T020S0R5	1206	20	0.5	15	0.01	0.05	0.5	0.4	0.42	88	28	120
SD1206T040S0R5	1206	40	0.5	15	0.01	0.05	0.5	0.45	0.48	88	28	120
SD1206T060S0R5	1206	60	0.5	15	0.01	0.05	0.5	0.48	0.55	88	28	120
SD1206T020S1R0	1206	20	1.0	20	0.015	0.2	1.0	0.46	0.50	88	28	110
SD1206T040S1R0	1206	40	1.0	20	0.015	0.2	1.0	0.46	0.50	88	28	110
SD1206T060S1R0	1206	60	1.0	20	0.015	0.2	1.0	0.62	0.70	88	28	110
SD1206T100S1R0	1206	100	1.0	20	0.015	0.2	1.0	0.76	0.85	88	28	110
SD1206T020S2R0	1206	20	2.0	40	0.03	0.2	2.0	0.47	0.50	75	17	115
SD1206T040S2R0	1206	40	2.0	40	0.03	0.2	2.0	0.47	0.50	75	17	115
SD1206T060S2R0	1206	60	2.0	40	0.03	0.2	2.0	0.58	0.75	75	17	115
SD1206T100S2R0	1206	100	2.0	40	0.03	0.2	2.0	0.75	0.85	75	17	115
SD1206T040S3R0	1206	40	3.0	40	0.03	0.2	3.0	0.53	0.55	88	28	110
SD1206T060S3R0	1206	60	3.0	40	0.03	0.2	3.0	0.75	0.80	88	28	110
SD1206T020L1R0	1206	20	1.0	25	0.3	1.0	1.0	0.37	0.38	88	28	115
SD1206T040L1R0	1206	40	1.0	25	0.3	1.0	1.0	0.37	0.38	88	28	115
SD0805S020S0R1	0805	20.0	0.1	2.0	0.004	0.03	0.1	0.38	0.45	160	110	18
SD0805S040S0R1	0805	40.0	0.1	2.0	0.004	0.03	0.1	0.4	0.50	160	110	18
SD0805S020S0R2	0805	20.0	0.2	2.0	0.008	0.05	0.2	0.42	0.45	160	110	15
SD0805S040S0R2	0805	40.0	0.2	2.0	0.008	0.05	0.2	0.45	0.50	160	110	15
SD0805S020S0R3	0805	20.0	0.3	2.0	0.008	0.05	0.3	0.47	0.50	160	110	30
SD0805S040S0R3	0805	40.0	0.3	2.0	0.008	0.05	0.3	0.47	0.50	160	110	30
SD0805S020S0R5	0805	20.0	0.5	5.0	0.015	0.1	0.5	0.4	0.44	120	28	28
SD0805S030S0R5	0805	30.0	0.5	5.0	0.015	0.1	0.5	0.4	0.46	120	28	28
SD0805S040S0R5	0805	40.0	0.5	5.0	0.015	0.1	0.5	0.4	0.48	120	28	28
SD0805S020S1R0	0805	20.0	1.0	10.0	0.028	0.2	1.0	0.42	0.45	120	28	115
SD0805S040S1R0	0805	40.0	1.0	10.0	0.008	0.05	1.0	0.49	0.55	88	28	110
SD0805S060S1R0	0805	60.0	1.0	10.0	0.028	0.2	1.0	0.62	0.65	120	28	115
SD0805S020L1R0	0805	20.0	1.0	10.0	0.3	1.0	1.0	0.37	0.38	88	28	115
SD0805S040L1R0	0805	40.0	1.0	10.0	0.3	1.0	1.0	0.37	0.38	88	28	115
SD0603S020S0R1	0603	20	0.1	2	0.008	0.05	0.100	0.38	0.40	160	110	30
SD0603S040S0R1	0603	40	0.1	2	0.008	0.05	0.100	0.38	0.40	160	110	30
SD0603S020S0R2	0603	20	0.2	2	0.008	0.05	0.200	0.43	0.45	160	110	35
SD0603S040S0R2	0603	40	0.2	2	0.0005	0.0010	0.200	0.43	0.45	160	110	35
SD0603S020S0R3	0603	20	0.3	2	0.008	0.05	0.300	0.47	0.50	160	110	35
SD0603S040S0R3	0603	40	0.3	2	0.008	0.05	0.300	0.47	0.50	160	110	35

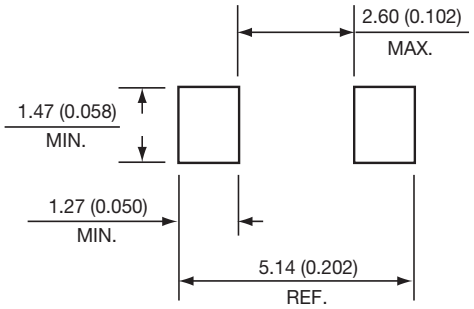
PAD LAYOUT

mm (inches)

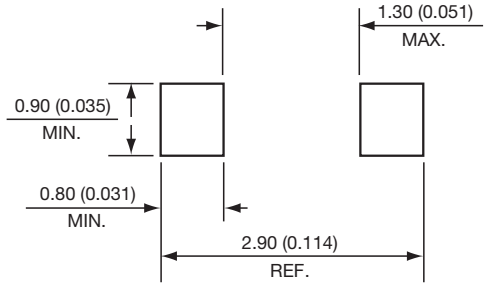
0603



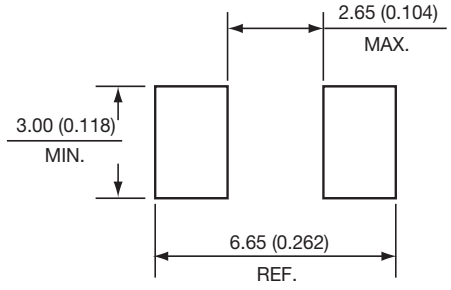
2010



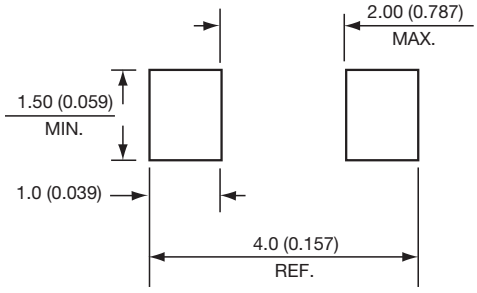
0805



2114



1206
1206-T



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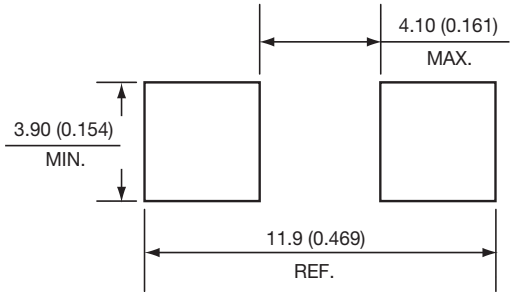

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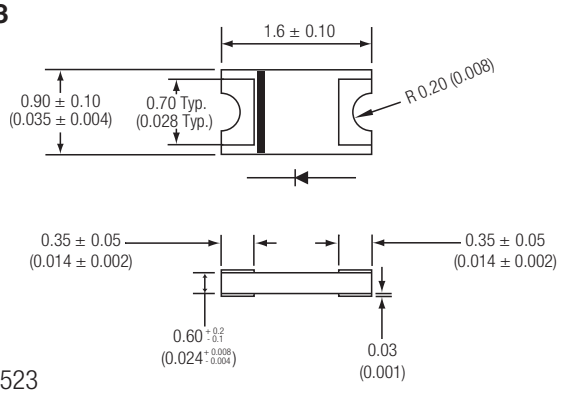
CASE DRAWINGS

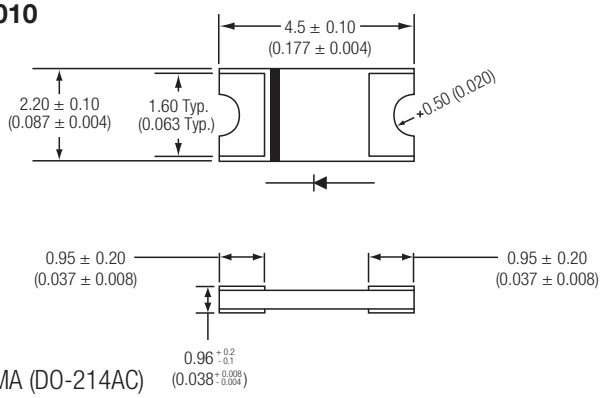
mm (inches)

0603



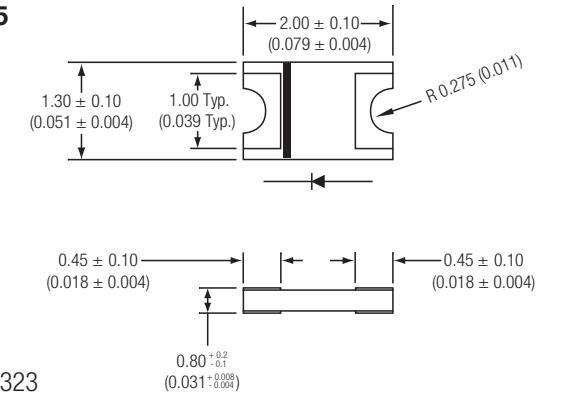
SOD-523

2010



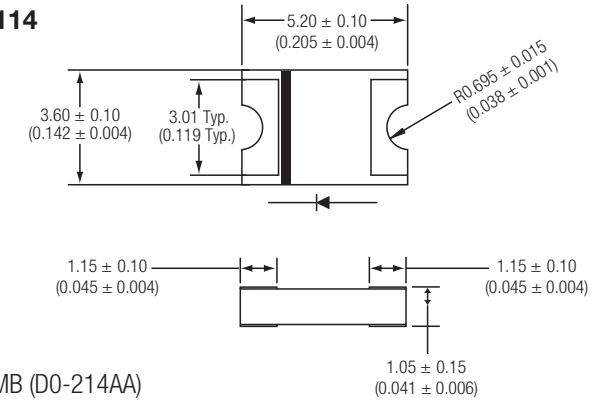
SMA (DO-214AC)

0805



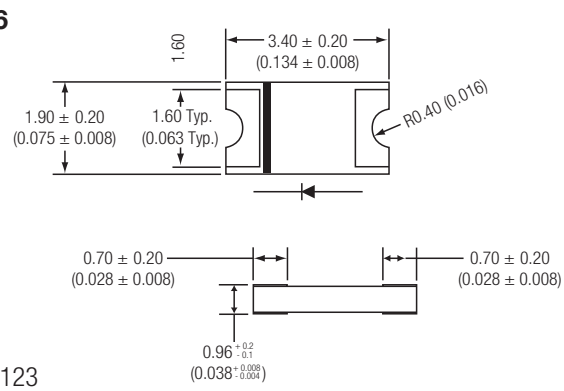
SOD-323

2114



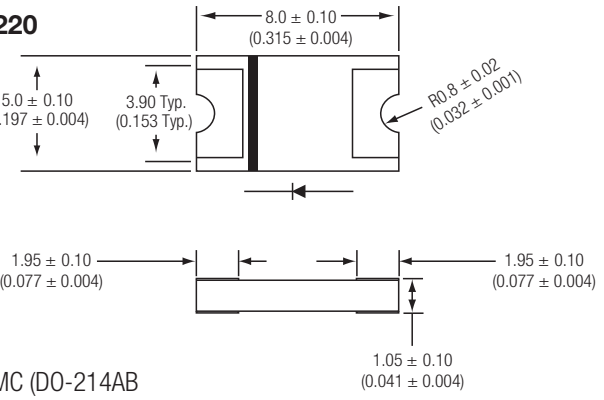
SMB (DO-214AA)

1206



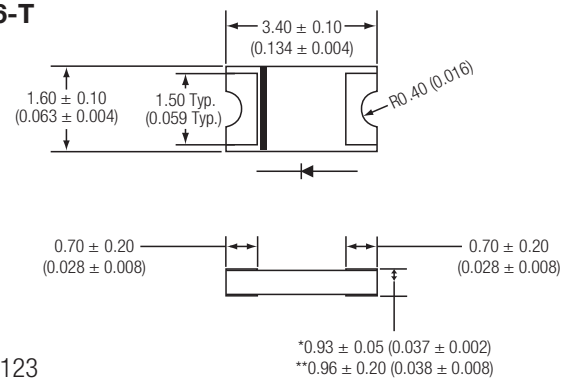
SOD-123

3220



SMC (DO-214AB

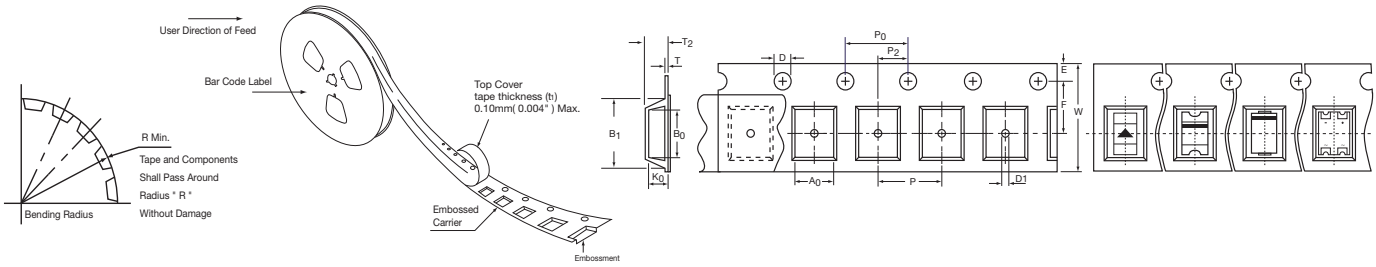
1206-T



SOD-123

Schottky Barrier Rectifier Diode
Lead-less Chip Form

CARRIER TAPE



EMBOSSED TAPE

mm (inches)

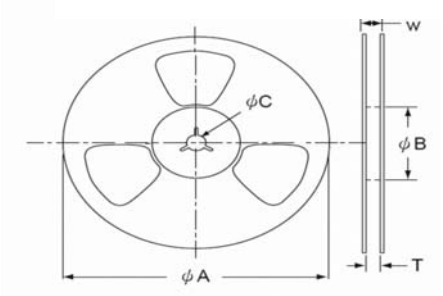
Tape Size	D	E	P_0	A_0	B_0	K_0	T max	P_2
8, 12 mm	1.50 ± 0.1 (0.059 ±0.004)	1.75 ± 0.1 (0.069 ± 0.004)	4.0 ± 0.1 (0.157 ± 0.004)	See Note 1			0.4 -0.016	2.0 ± 0.1 (0.079 ± 0.002)
16 mm	1.55 ± 0.05 (0.061 ±0.002)	1.75 ± 0.1 (0.069 ± 0.004)	4.0 ± 0.1 (0.157 ± 0.004)					

Product Size	Tape Size	B_1	D_1	F	P	W	T_2	R Min
0603	8mm	2.0 max (0.079 max)	0.80 ± 0.05 (0.031 ± 0.002)	3.50 ± 0.05 (0.138 ± 0.002)	4.00 ± 0.10 (0.157 ± 0.004)	8.00 ± 0.30 (0.315 ± 0.012)	1.00 ± 0.10 (0.039 ± 0.004)	25 -0.98
0805							1.22 ± 0.10 (0.048 ± 0.004)	
1206	12mm	8.2 max (0.323 max)	1.50 min. (0.059 min.)	5.50 ± 0.05 (0.217 ± 0.002)		12.00 ± 0.30 (0.472 ± 0.012)	1.75 ± 0.1 (0.069 ± 0.004)	30 -1.181
1206-S							1.40 ± 0.1 (0.055 ± 0.004)	
2010							1.51 ± 0.10 (0.059 ± 0.004)	
2114					8.00 ± 0.10 (0.315 ± 0.004)		1.65 ± 0.10 (0.065 ± 0.004)	
3220	16mm	12.1 max (0.476 max)		7.50 ± 0.10 (0.295 ± 0.004)		16.00 ± 0.30 (0.630 ± 0.012)	2.50 max (0.098 max)	40 -1.575

NOTES:
1. A_0, B_0, and K_0 are determined by component size. The clearance between the components and the cavity must be within 0.05 mm (0.002") Min.to 0.50 mm (0.02") Max. for 8mm tape, and 0.15mm (0.066") Min. to 0.90 mm (0.035") Max. 12 mm tape.
2. All surface mount components are packed in accordance with EIA standard 481-1 and 481-2

REEL DIMENSIONS

mm (inches)



Symbol	Tape Size	φA	φB	φC	W	T
0603	8 -0.315	178 ± 2.0 (7.008 ± 0.079)	60 ± 0.5 (2.362 ± 0.020)	13.5 ± 0.5 (0.532 ± 0.020)	12.0 ± 0.5 (0.472 ± 0.020)	9.0 ± 0.5 (0.354 ± 0.020)
0805						
1206	12 -0.472	178 ± 2.0 (7.008 ± 0.079)	50 min (1.969 min)	13.0 ± 0.5 (0.512 ± 0.020)	18.7 max (0.736 max)	14.4 max (0.567 max)
1206-T						
2010						
2114		330 ± 2.0 (12.99 ± 0.079)				
3220	16 -0.63				22.7 max (0.893 max)	18.4 max (0.724 max)

QUANTITIES

Size	Reel Size	Qty/Reel
0603	7"	3,000
0805		
1206	7"	3,000
1206-T		
2010		
2114	13"	5,000
3220	13"	3,000

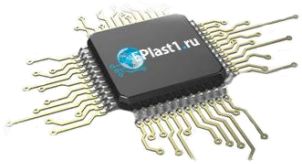
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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