

P4KE**** Series

GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR

VOLTAGE - 6.8 TO 550 Volts

400Watt Peak Power 1.0 Watt Steady State

Feature

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- * Glass passivated chip junction in DO-41 package
- * 400W surge capability at 1ms
- * Excellent clamping capability
- * Low zener impedance
- * Fast response time: typically less than 1.0 ps from 0 volts to BV min
- * Typical IR less than 1μA above 10V
- * High temperature soldering guaranteed: 260 /10 seconds/.375", (9.5mm) lead length/5lbs., (2.3kg) tension

Mechanical Data

Case: JEDEC DO-41 molded plastic

Terminals: Axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color band denoted cathode except Bipolar

Mounting Position: Any

Weight: 0.011 oz., 0.284 g

DEVICES FOR BIPOLAR APPLICATIONS

For Bidirectional use C or CA Suffix for types P4KE6.8 thru types P4KE550

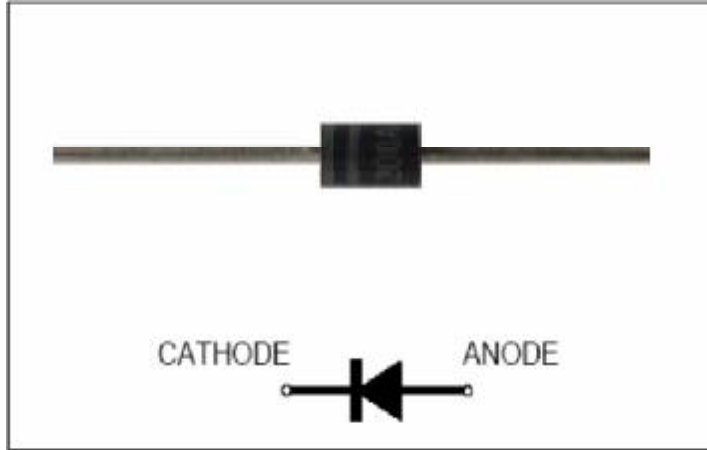
Electrical characteristics apply in both directions.marking code is all type.

1.Electrical Characteristic

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.



We declare that the material of product compliance with ROHS requirements

RATING	SYMBOL	VALUE	UNITS
Peak Power Dissipation at $T_A=25^\circ\text{C}$, $T_p=1\text{ms}$ (Note 1)	P_{PPM}	Minimum 400	Watts
Steady State Power Dissipation at $T_L=75^\circ\text{C}$ Lead Lengths .375", (9.5mm) (Note 2)	$P_{M(AV)}$	1.0	Watts
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load(JECED Method) (Note 3)	I_{FSM}	40	Amps
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +175	°C

NOTES:

1. Non-repetitive current pulse, per Fig. 3 and derated above $T_A=25^\circ\text{C}$ per Fig. 2.
2. Mounted on Copper Leaf area of 1.57in²(40mm²).
3. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.

P4KE**** Series

UNI-DIRECTIONAL PART NUMBER	REVERSE STAND-OFF VOLTAGE VRWM (V)	BREAKDOWN VOLTAGE VBR (V) MIN. @IT	BREAKDOWN VOLTAGE VBR (V) MAX. @IT	TEST CURRENT IT (mA)	MAXIMUM CLAMPING VOLTAGE @IPP VC (V)	REVERSE LEAKAGE @VRWM IR (uA)
P4KE6.8	5.5	6.12	7.48	10	10.8	1000
P4KE6.8A	5.8	6.45	7.14	10	10.5	1000
P4KE7.5	6.1	6.75	8.25	10	11.7	500
P4KE7.5A	6.4	7.13	7.88	10	11.3	500
P4KE8.2	6.6	7.38	9.02	10	12.5	200
P4KE8.2A	7.0	7.79	8.61	10	12.1	200
P4KE9.1	7.4	8.2	10.0	1	13.8	50
P4KE9.1A	7.8	8.7	9.5	1	13.4	50
P4KE10	8.1	9.0	11.0	1	15.0	10
P4KE10A	8.6	9.5	10.5	1	14.5	10
P4KE11	8.9	9.9	12.1	1	16.2	1
P4KE11A	9.4	10.5	11.6	1	15.6	1
P4KE12	9.7	10.8	13.2	1	17.3	1
P4KE12A	10.2	11.4	12.6	1	16.7	1
P4KE13	10.5	11.7	14.3	1	19.0	1
P4KE13A	11.1	12.4	13.7	1	18.2	1
P4KE15	12.1	13.5	16.5	1	22.0	1
P4KE15A	12.8	14.3	15.8	1	21.2	1
P4KE16	12.9	14.4	17.6	1	23.5	1
P4KE16A	13.6	15.2	16.8	1	22.5	1
P4KE18	14.5	16.2	19.8	1	26.5	1
P4KE18A	15.3	17.1	18.9	1	25.2	1
P4KE20	16.2	18.0	22.0	1	29.1	1
P4KE20A	17.1	19.0	21.0	1	27.7	1
P4KE22	17.8	19.8	24.2	1	31.9	1
P4KE22A	18.8	20.9	23.1	1	30.6	1
P4KE24	19.4	21.6	26.4	1	34.7	1
P4KE24A	20.5	22.8	25.2	1	33.2	1
P4KE27	21.8	24.3	29.7	1	39.1	1
P4KE27A	23.1	25.7	28.4	1	37.5	1
P4KE30	24.3	27.0	33.0	1	43.5	1
P4KE30A	25.6	28.5	31.5	1	41.4	1
P4KE33	26.8	29.7	36.3	1	47.7	1
P4KE33A	28.2	31.4	34.7	1	45.7	1
P4KE36	29.1	32.4	39.6	1	52.0	1
P4KE36A	30.8	34.2	37.8	1	49.9	1
P4KE39	31.6	35.1	42.9	1	56.4	1
P4KE39A	33.3	37.1	41.0	1	53.9	1
P4KE43	34.8	38.7	47.3	1	61.9	1
P4KE43A	36.8	40.9	45.2	1	59.3	1
P4KE47	38.1	42.3	51.7	1	67.8	1
P4KE47A	40.2	44.7	49.4	1	64.8	1
P4KE51	41.3	45.9	56.1	1	73.5	1
P4KE51A	43.6	48.5	53.6	1	70.1	1
P4KE56	45.6	50.4	61.6	1	80.5	1
P4KE56A	47.8	53.2	58.8	1	77.0	1
P4KE62	50.2	55.8	68.2	1	89.0	1
P4KE62A	53.0	58.9	65.1	1	85.0	1
P4KE68	55.1	61.2	74.8	1	98.0	1
P4KE68A	58.1	64.6	71.4	1	92.0	1

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P4KE75	60.7	67.5	82.5	1	108.0	1
P4KE75A	64.1	71.3	78.8	1	103.0	1
P4KE82	66.4	73.8	90.2	1	118.0	1
P4KE82A	70.1	77.9	86.1	1	113.0	1
P4KE91	73.7	81.9	100.0	1	131.0	1
P4KE91A	77.8	86.5	95.5	1	125.0	1
P4KE100	81.0	90.0	110.0	1	144.0	1
P4KE100A	85.5	95.0	105.0	1	137.0	1
P4KE110	89.2	99.0	121.0	1	158.0	1
P4KE110A	94.0	105.0	116.0	1	152.0	1
P4KE120	97.2	108.0	132.0	1	173.0	1
P4KE120A	102.0	114.0	126.0	1	165.0	1
P4KE130	105.0	117.0	143.0	1	187.0	1
P4KE130A	111.0	124.0	137.0	1	179.0	1
P4KE150	121.0	135.0	165.0	1	215.0	1
P4KE150A	128.0	143.0	158.0	1	207.0	1
P4KE160	130.0	144.0	176.0	1	230.0	1
P4KE160A	136.0	152.0	168.0	1	219.0	1
P4KE170	138.0	153.0	187.0	1	244.0	1
P4KE170A	145.0	162.0	179.0	1	234.0	1
P4KE180	146.0	162.0	198.0	1	258.0	1
P4KE180A	154.0	171.0	189.0	1	246.0	1
P4KE200	162.0	180.0	220.0	1	287.0	1
P4KE200A	171.0	190.0	210.0	1	274.0	1
P4KE220	175.0	198.0	242.0	1	344.0	1
P4KE220A	185.0	209.0	231.0	1	328.0	1
P4KE250	202.0	225.0	275.0	1	360.0	1
P4KE250A	214.0	237.0	263.0	1	344.0	1
P4KE300	243.0	270.0	330.0	1	430.0	1
P4KE300A	256.0	285.0	315.0	1	414.0	1
P4KE350	284.0	315.0	385.0	1	504.0	1
P4KE350A	300.0	332.0	368.0	1	482.0	1
P4KE400	324.0	360.0	440.0	1	574.0	1
P4KE400A	342.0	380.0	420.0	1	548.0	1
P4KE440	356.0	396.0	484.0	1	631.0	1
P4KE440A	376.0	418.0	462.0	1	600.0	1
P4KE480	389.0	432.0	528.0	1	686.0	1
P4KE480A	408.0	456.0	504.0	1	658.0	1
P4KE510	413.0	459.0	561.0	1	729.0	1
P4KE510A	434.0	485.0	535.0	1	698.0	1
P4KE550	445.0	495.0	605.0	1	791.0	1
P4KE550A	467.0	522.5	577.5	1	760.0	1

NOTES:

1. Non-repetitive current pulse, per Fig. 3 and derated above TA=25°C per Fig. 2.
2. Mounted on Copper Leaf area of 1.57in²(40mm²).
3. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.

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2. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1-Peak Pulse Power Rating Curve

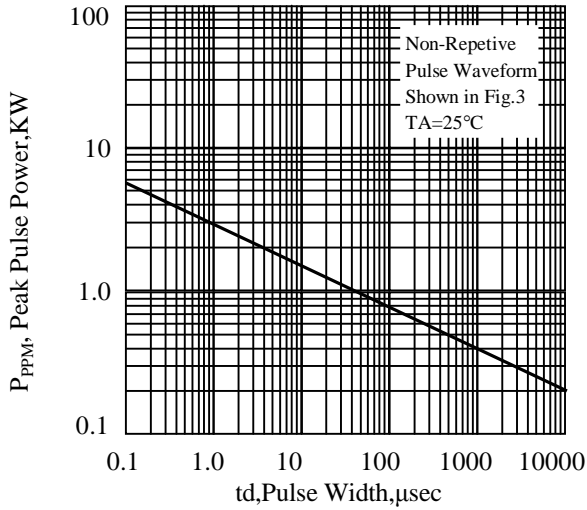


Fig. 2-Pulse Derating Curve

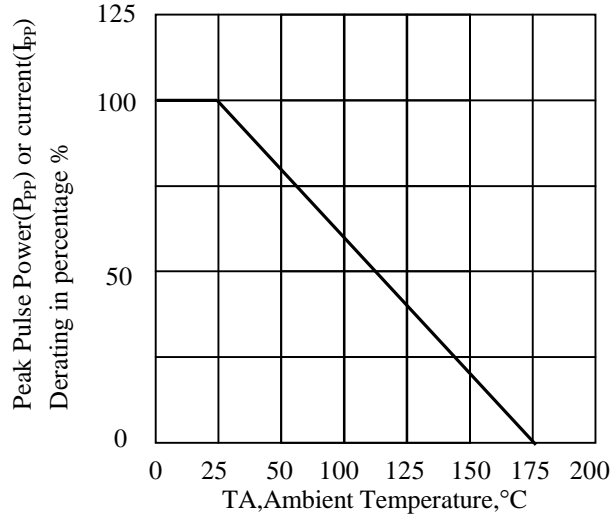


Fig. 3-Pulse Waveform

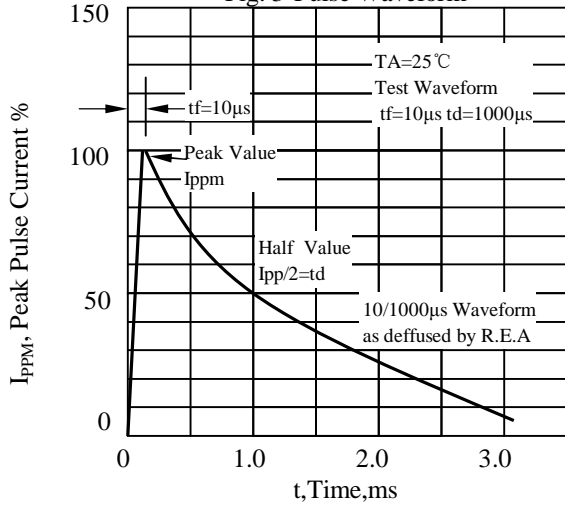


Fig. 4-Typical Junction Capacitance Unidirectional

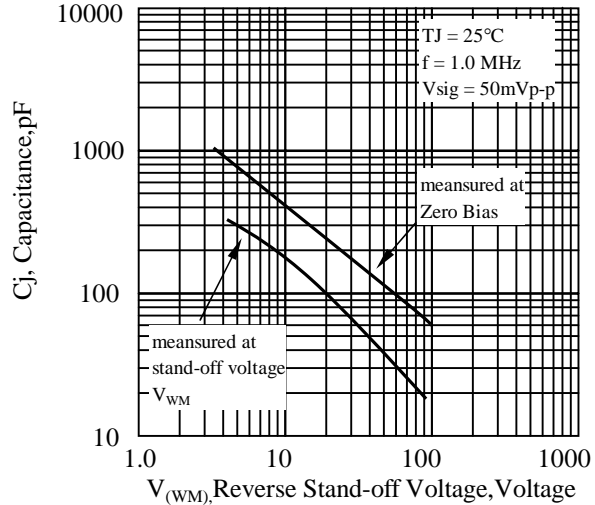


Fig. 5-Steady State Power Derating Curve

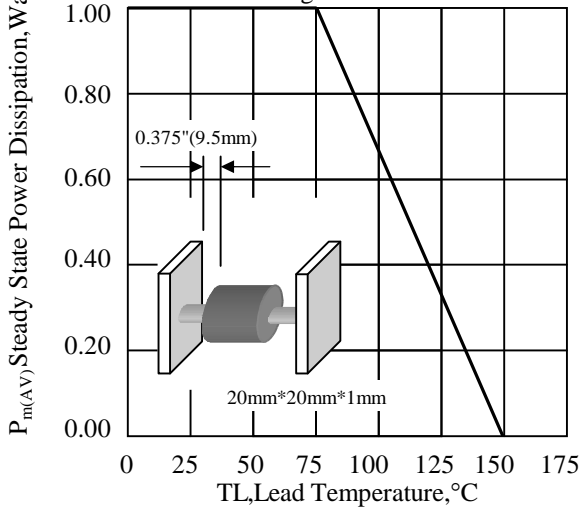
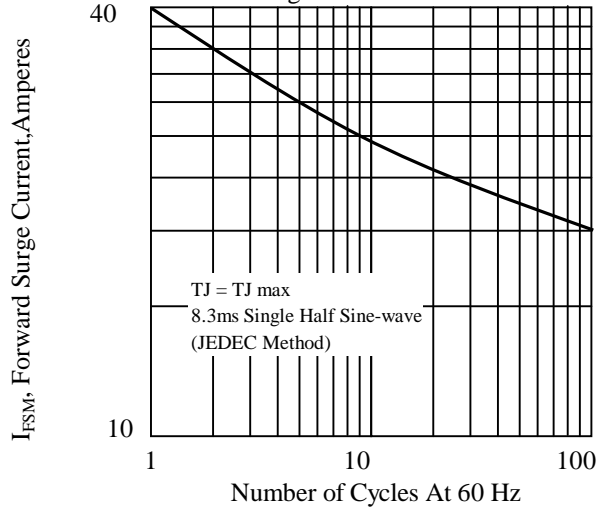
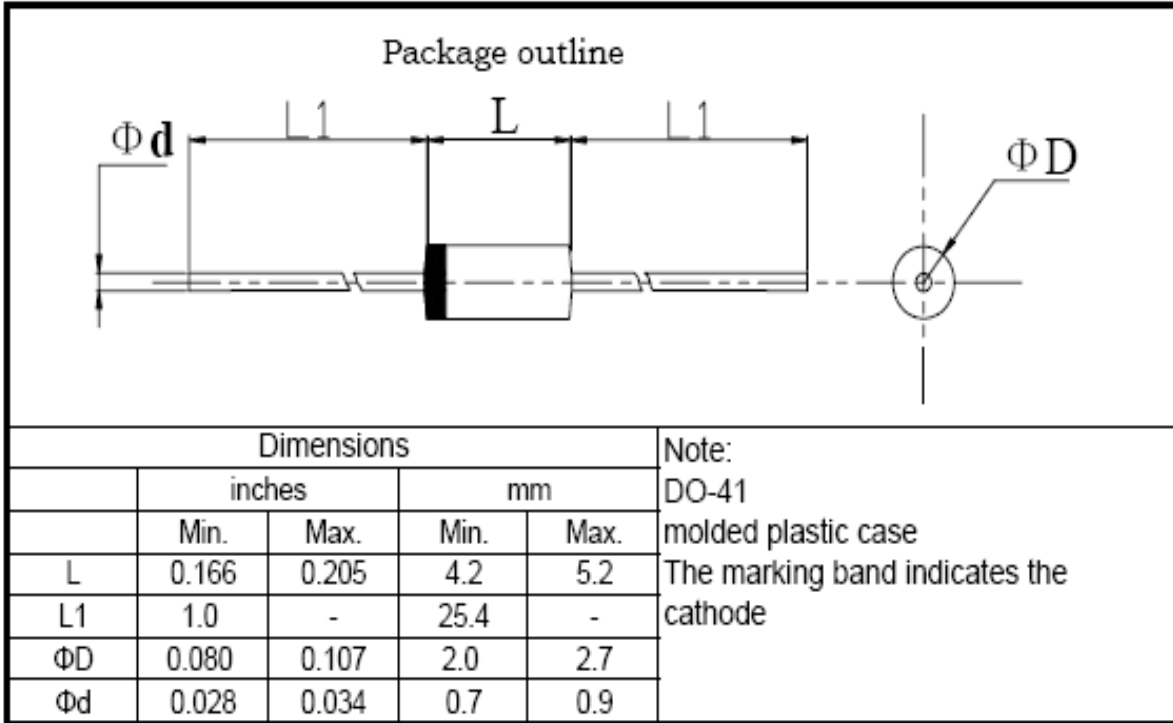


Fig. 6-Maximum Non-Repetitive Peak Forward Surge Current Unidirectional



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3. dimension:

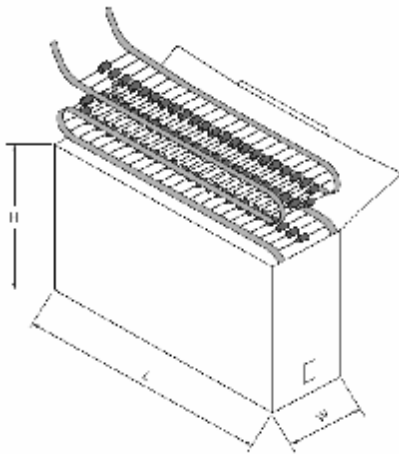


标题:	文件编号: WI-250
	第 4 版 第 0 次修改
	第 1 页

塑封生产线轴向产品包装规范

1 弹带盒装 ammo and box

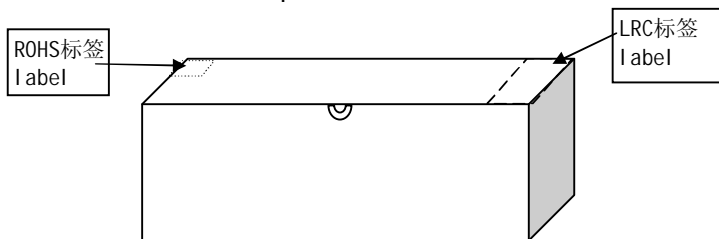
1.1. 弹带盒规格 ammo spec.



单位: mm

	L	W	H
T52	262±2	76±2	90±2
T42	262±2	64±2	90±2
T26	250±3	45±3	95±3

1.2 弹带内盒要求 inner box spec.



标题: 塑封生产线轴向产品包装规范	文件编号: WI-250
	第 4 版 第 0 次修改
	第 2 页

1.4 标签要求 label spec.

1.4.1 LRC标签 LRC label

成型 FORMING ***** ← 成型规格forming spec.

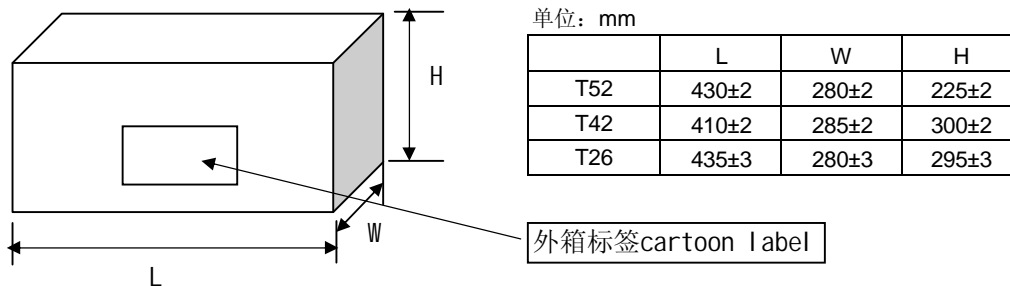
型号 TYPE ***** ← LRC产品型号 type

重复峰压 (V) PRV (V)	****	← 产品重复峰压值 peak repetitive voltage
额定电流 (A) I _o (A)	**	← 产品额定电流值 average output current
数量 (只) QTY (pcs)	****	← 产品数量 quantity
检验员 CHECKER	02	
日期: DATE:	*****	← 产品生产日期 date

1.4.2环保标签 environmental protection label



2.外箱规格 carton spec.



3 按以上包装方式, 编带数量和外包装箱产品数量: typing and carton spec.

	塑封外型			
	A-405 & DO-41 & R-1	R-3	DO-15	DO-201AD
每根编带数量 quantity/ammo	3K	1.8K	2K(T52) 1.8K(T26)	0.8K
外箱数量 (T52编带) quantity/cartoon	30K	18K	20K	8.0K
外箱数量 (T26编带) quantity/cartoon	60K	36K	36K	-
外箱数量 (T42编带) quantity/cartoon	54K	32.4K	36K	-

标题:

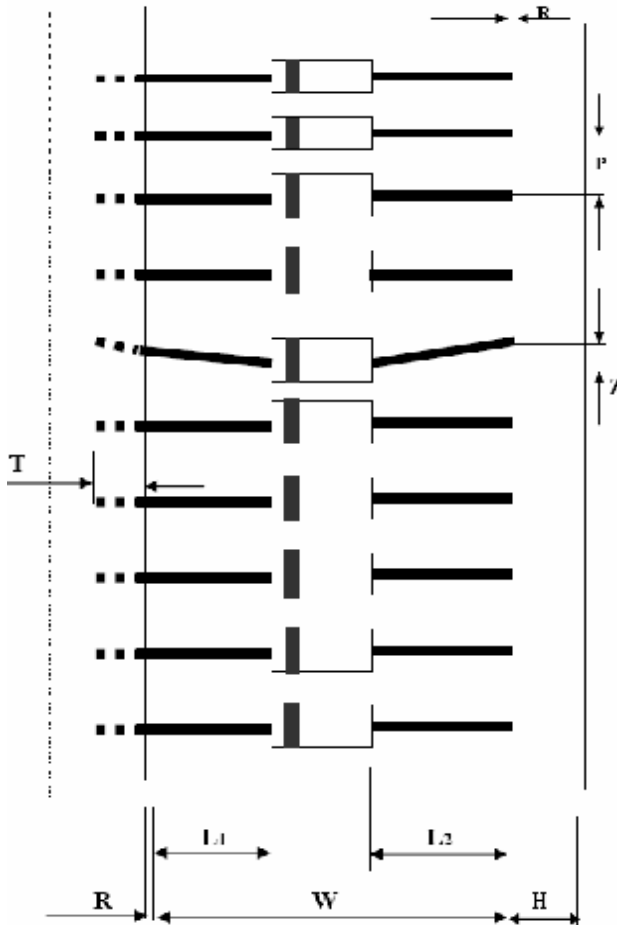
塑封生产线轴向产品包装规范

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第 3 页

4 编带规格 brede spec



尺寸代号	编带尺寸 typing dimension					
	26/tape	35/tape	40/tape	42/tape	52/tape	52/tape#
W	26 0.0/+1.6	35 -1.0/+0.5	40 -1.0/+0.5	42 -1.0/+1.0	52 -1.0/+2.0	52 -1.0/+2.0
P	5±0.5	5±0.5	5±0.5	5±0.5	5±0.5	10±0.5
L1-L2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
H	6±1.0	6±1.0	6±1.0	6±1.0	6±1.0	6±1.0
Z	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
R	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
T	>3.5	>3.5	>3.5	>3.5	>3.5	>3.5

注: 52编带# 为DO-201AD编带规格 "52编带#" just for D0-201AD

1. 红白编带厚度为0.05mm; 两种胶带各自之间无明显色差; 编带要求均为胶带。
The typing thickness is 0.05mm and color is obvious difference
2. 两端引带20~40cm. Typing lead over 20~40cm
3. 红色编带一端为二极管“负极”; 白色编带一端为二极管“正极”。
red color is cathode ,white color is anode
4. 无卤 green epoxy compound (无卤产品才贴HF only)

Green

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4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	周杰	2010-5-4
2	调整储存温度为175度	周杰	2010-9-23
3	增加包装规范	周杰	2011-11-28
4	具体说明产品印字为产品名称。	周杰	2012-5-9
5	调整结电容曲线	周杰	2012-8-15

单击下面可查看定价，库存，交付和生命周期等信息

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