

TABLE OF CONTENTS

1.DATA SHEET PAGE 1

2.MARKING PAGE 5

3.TAPING PAGE 6

4.PACKING PAGE 7

1.DAT SHEET

GDZJ2.0~GDZJ56

AXIAL LEAD ZENER DIODES

VOLTAGE 2.0 to 56 Volts

POWER 500 mWatts

DO-35

Unit: inch (mm)

FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- In compliance with EU RoHS 2002/95/EC directives

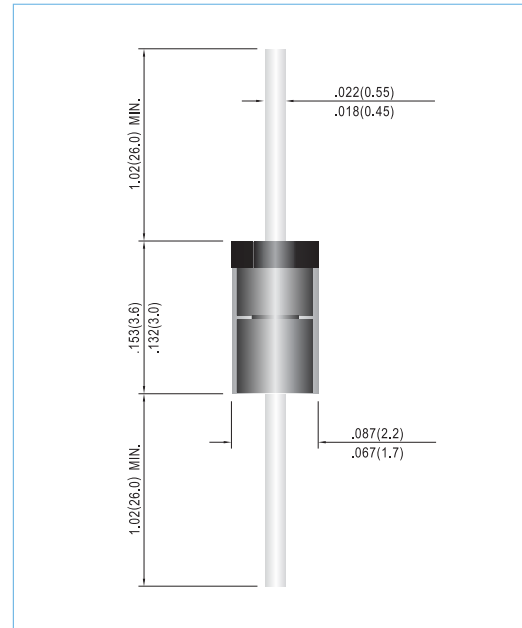
MECHANICAL DATA

- Case: Molded Glass DO-35
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.13 grams
- Mounting Position: Any
- Ordering information: Suffix : " -35 " to order DO-35 Package
- Packing information

B - 2K per Bulk box

T/R - 10K per 13" plastic Reel

T/B - 5K per horiz. tape & Ammo box



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation at $T_{amb} = 25\text{ }^{\circ}\text{C}$	P_{TOT}	500	mW
Junction Temperature	T_J	175	$^{\circ}\text{C}$
Storage Temperature Range	T_S	-65 to +175	$^{\circ}\text{C}$

Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

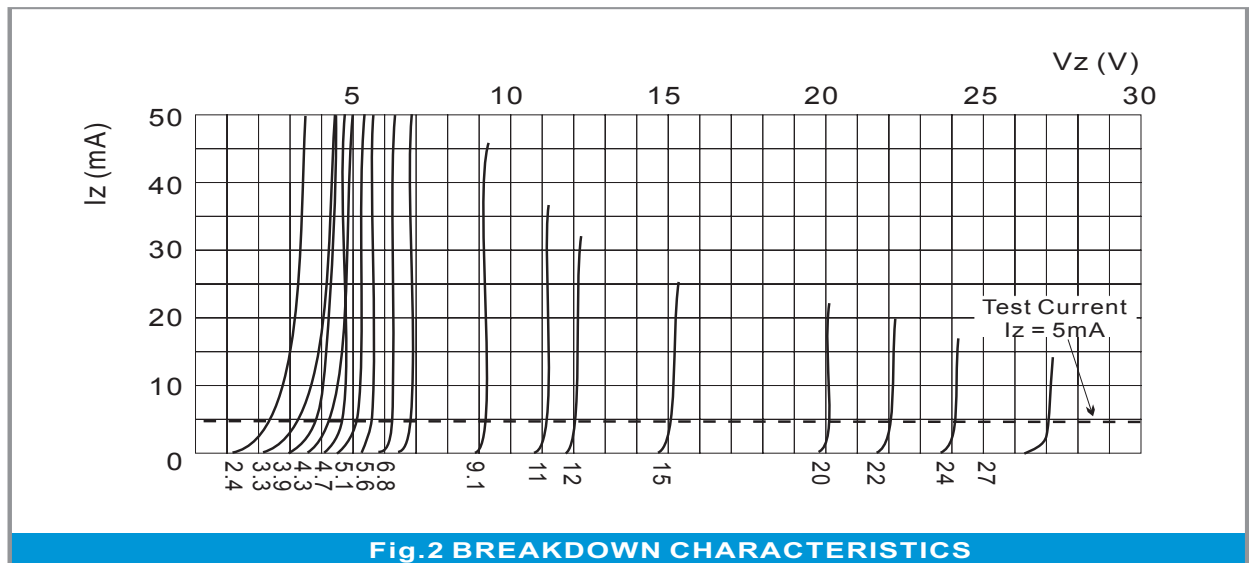
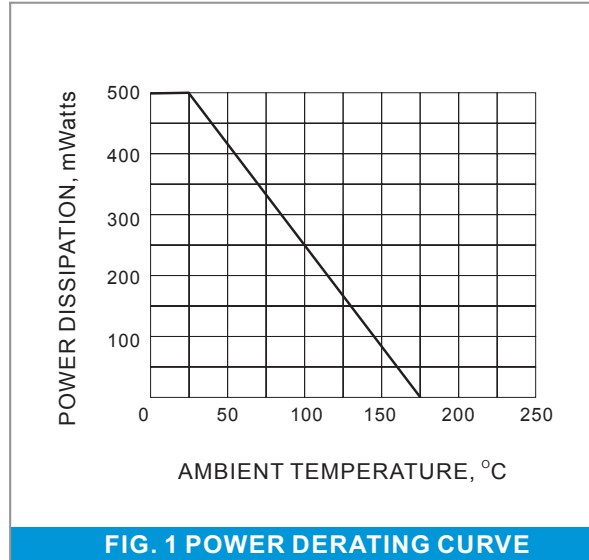
Parameter	Symbol	Min.	Typ.	Max.	Units
Thermal Resistance Junction to Ambient Air	R_{thA}	—	—	0.3	K/mW
Forward Voltage at $I_F = 100\text{mA}$	V_F	—	—	1	V

Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

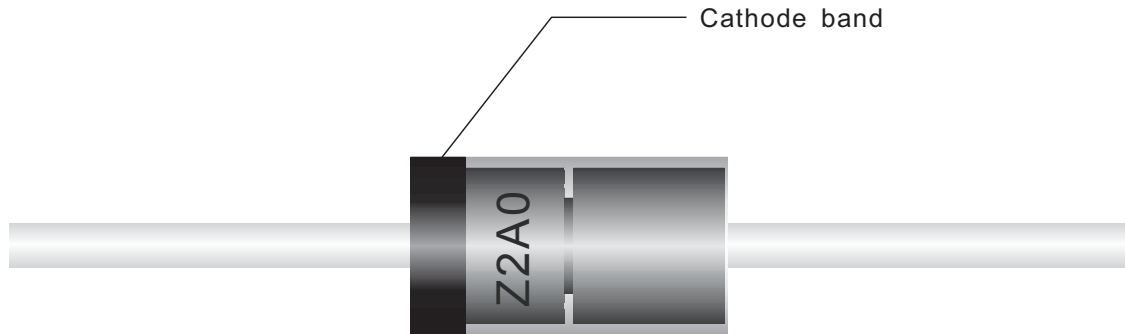
Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	Vz @ IzT			ZzT @ IzT		Zzk @ IzK		IR @ VR		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
500 mW Zener Diodes										
GDZJ 2.0A	2	1.88	2.1	100	5	1000	0.5	120	0.5	Z2A0
GDZJ 2.0B	2	2.02	2.2	100	5	1000	0.5	120	0.5	Z2B0
GDZJ 2.2A	2.2	2.12	2.3	100	5	1000	0.5	120	0.7	Z2A2
GDZJ 2.2B	2.2	2.22	2.41	100	5	1000	0.5	120	0.7	Z2B2
GDZJ 2.4A	2.4	2.33	2.52	100	5	1000	0.5	120	1	Z2A4
GDZJ 2.4B	2.4	2.43	2.63	100	5	1000	0.5	120	1	Z2B4
GDZJ 2.7A	2.7	2.54	2.75	110	5	1000	0.5	120	1	Z2A7
GDZJ 2.7B	2.7	2.69	2.91	110	5	1000	0.5	120	1	Z2B7
GDZJ 3.0A	3.0	2.85	3.07	120	5	1000	0.5	50	1	Z3A0
GDZJ 3.0B	3.0	3.01	3.22	120	5	1000	0.5	50	1	Z3B0
GDZJ 3.3A	3.3	3.16	3.38	120	5	1000	0.5	20	1	Z3A3
GDZJ 3.3B	3.3	3.32	3.53	120	5	1000	0.5	20	1	Z3B3
GDZJ 3.6A	3.6	3.46	3.7	100	5	1000	1	10	1	Z3A6
GDZJ 3.6B	3.6	3.6	3.85	100	5	1000	1	10	1	Z3B6
GDZJ 3.9A	3.9	3.74	4.01	100	5	1000	1	5	1	Z3A9
GDZJ 3.9B	3.9	3.89	4.16	100	5	1000	1	5	1	Z3B9
GDZJ 4.3A	4.3	4.04	4.29	100	5	1000	1	5	1	Z4A3
GDZJ 4.3B	4.3	4.17	4.43	100	5	1000	1	5	1	Z4B3
GDZJ 4.3C	4.3	4.3	4.57	100	5	1000	1	5	1	Z4C3
GDZJ 4.7A	4.7	4.44	4.68	90	5	900	1	5	1	Z4A7
GDZJ 4.7B	4.7	4.55	4.8	90	5	900	1	5	1	Z4B7
GDZJ 4.7C	4.7	4.68	4.93	90	5	900	1	5	1	Z4C7
GDZJ 5.1A	5.1	4.81	5.07	80	5	800	1	5	1.5	Z5A1
GDZJ 5.1B	5.1	4.94	5.2	80	5	800	1	5	1.5	Z5B1
GDZJ 5.1C	5.1	5.09	5.37	80	5	800	1	5	1.5	Z5C1
GDZJ 5.6A	5.6	5.28	5.55	60	5	500	1	5	2.5	Z5A6
GDZJ 5.6B	5.6	5.45	5.73	60	5	500	1	5	2.5	Z5B6
GDZJ 5.6C	5.6	5.61	5.91	60	5	500	1	5	2.5	Z5C6
GDZJ 6.2A	6.2	5.78	6.09	60	5	300	1	5	3	Z6A2
GDZJ 6.2B	6.2	5.96	6.27	60	5	300	1	5	3	Z6B2
GDZJ 6.2C	6.2	6.12	6.44	60	5	300	1	5	3	Z6C2
GDZJ 6.8A	6.8	6.29	6.63	20	5	150	0.5	2	3.5	Z6A8
GDZJ 6.8B	6.8	6.49	6.83	20	5	150	0.5	2	3.5	Z6B8
GDZJ 6.8C	6.8	6.66	7.01	20	5	150	0.5	2	3.5	Z6C8
GDZJ 7.5A	7.5	6.85	7.22	20	5	120	0.5	0.5	4	Z7A5
GDZJ 7.5B	7.5	7.07	7.45	20	5	120	0.5	0.5	4	Z7B5
GDZJ 7.5C	7.5	7.29	7.67	20	5	120	0.5	0.5	4	Z7C5
GDZJ 8.2A	8.2	7.53	7.92	20	5	120	0.5	0.5	5	Z8A2
GDZJ 8.2B	8.2	7.78	8.19	20	5	120	0.5	0.5	5	Z8B2
GDZJ 8.2C	8.2	8.03	8.45	20	5	120	0.5	0.5	5	Z8C2
GDZJ 9.1A	9.1	8.29	8.73	25	5	120	0.5	0.5	6	Z9A1
GDZJ 9.1B	9.1	8.57	9.01	25	5	120	0.5	0.5	6	Z9B1
GDZJ 9.1C	9.1	8.83	9.3	25	5	120	0.5	0.5	6	Z9C1
GDZJ 10A	10	9.12	9.59	30	5	120	0.5	0.2	7	Z10A
GDZJ 10B	10	9.41	9.9	30	5	120	0.5	0.2	7	Z10B
GDZJ 10C	10	9.7	10.2	30	5	120	0.5	0.2	7	Z10C
GDZJ 10D	10	9.94	10.44	30	5	120	0.5	0.2	7	Z10D
GDZJ 11A	11	10.18	10.71	30	5	120	0.5	0.2	8	Z11A
GDZJ 11B	11	10.5	11.05	30	5	120	0.5	0.2	8	Z11B
GDZJ 11C	11	10.82	11.38	30	5	120	0.5	0.2	8	Z11C

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	Vz @ IzT			ZzT @ IzT		ZzK @ IzK		IR @ VR		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
500 mW Zener Diodes										
GDZJ 12A	12	11.13	11.71	30	5	110	0.5	0.2	9	Z12A
GDZJ 12B	12	11.44	12.03	30	5	110	0.5	0.2	9	Z12B
GDZJ 12C	12	11.74	12.35	30	5	110	0.5	0.2	9	Z12C
GDZJ 13A	13	12.11	12.75	35	5	110	0.5	0.2	10	Z13A
GDZJ 13B	13	12.55	13.21	35	5	110	0.5	0.2	10	Z13B
GDZJ 13C	13	12.99	13.66	35	5	110	0.5	0.2	10	Z13C
GDZJ 15A	15	13.44	14.13	40	5	110	0.5	0.2	11	Z15A
GDZJ 15B	15	13.89	14.62	40	5	110	0.5	0.2	11	Z15B
GDZJ 15C	15	14.35	15.09	40	5	110	0.5	0.2	11	Z15C
GDZJ 16A	16	14.8	15.57	40	5	150	0.5	0.2	12	Z16A
GDZJ 16B	16	15.25	16.04	40	5	150	0.5	0.2	12	Z16B
GDZJ 16C	16	15.69	16.51	40	5	150	0.5	0.2	12	Z16C
GDZJ 18A	18	16.22	17.06	45	5	150	0.5	0.2	13	Z18A
GDZJ 18B	18	16.82	17.7	45	5	150	0.5	0.2	13	Z18B
GDZJ 18C	18	17.42	18.33	45	5	150	0.5	0.2	13	Z18C
GDZJ 20A	20	18.02	18.96	55	5	200	0.5	0.2	15	Z20A
GDZJ 20B	20	18.63	19.59	55	5	200	0.5	0.2	15	Z20B
GDZJ 20C	20	19.23	20.22	55	5	200	0.5	0.2	15	Z20C
GDZJ 20D	20	19.72	20.72	55	5	200	0.5	0.2	15	Z20D
GDZJ 22A	22	20.15	21.2	30	5	200	0.5	0.2	17	Z22A
GDZJ 22B	22	20.64	21.71	30	5	200	0.5	0.2	17	Z22B
GDZJ 22C	22	21.08	22.17	30	5	200	0.5	0.2	17	Z22C
GDZJ 22D	22	21.52	22.63	30	5	200	0.5	0.2	17	Z22D
GDZJ 24A	24	22.05	23.18	35	5	200	0.5	0.2	19	Z24A
GDZJ 24B	24	22.61	23.77	35	5	200	0.5	0.2	19	Z24B
GDZJ 24C	24	23.12	24.31	35	5	200	0.5	0.2	19	Z24C
GDZJ 24D	24	23.63	24.85	35	5	200	0.5	0.2	19	Z24D
GDZJ 27A	27	24.26	25.52	45	5	250	0.5	0.2	21	Z27A
GDZJ 27B	27	24.97	26.26	45	5	250	0.5	0.2	21	Z27B
GDZJ 27C	27	25.63	26.95	45	5	250	0.5	0.2	21	Z27C
GDZJ 27D	27	26.29	27.64	45	5	250	0.5	0.2	21	Z27D
GDZJ 30A	30	26.99	28.39	55	5	250	0.5	0.2	23	Z30A
GDZJ 30B	30	27.7	29.13	55	5	250	0.5	0.2	23	Z30B
GDZJ 30C	30	28.36	29.82	55	5	250	0.5	0.2	23	Z30C
GDZJ 30D	30	29.02	30.51	55	5	250	0.5	0.2	23	Z30D
GDZJ 33A	33	29.68	31.22	65	5	250	0.5	0.2	25	Z33A
GDZJ 33B	33	30.32	31.88	65	5	250	0.5	0.2	25	Z33B
GDZJ 33C	33	30.90	32.5	65	5	250	0.5	0.2	25	Z33C
GDZJ 33D	33	31.49	33.11	65	5	250	0.5	0.2	25	Z33D
GDZJ 36A	36	32.14	33.79	75	5	250	0.5	0.2	27	Z36A
GDZJ 36B	36	32.79	34.49	75	5	250	0.5	0.2	27	Z36B
GDZJ 36C	36	33.4	35.13	75	5	250	0.5	0.2	27	Z36C
GDZJ 36D	36	34.01	35.77	75	5	250	0.5	0.2	27	Z36D
GDZJ 39A	39	34.68	36.47	85	5	250	0.5	0.2	30	Z39A
GDZJ 39B	39	35.36	37.19	85	5	250	0.5	0.2	30	Z39B
GDZJ 39C	39	36	37.85	85	5	250	0.5	0.2	30	Z39C
GDZJ 39D	39	36.63	38.52	85	5	250	0.5	0.2	30	Z39D
GDZJ 43	43	40	45	90	5	-	-	0.2	33	Z43
GDZJ 47	47	44	49	90	5	-	-	0.2	36	Z47
GDZJ 51	51	48	54	110	5	-	-	0.2	39	Z51
GDZJ 56	56	53	60	110	5	-	-	0.2	43	Z56

RATING AND CHARACTERISTIC CURVES



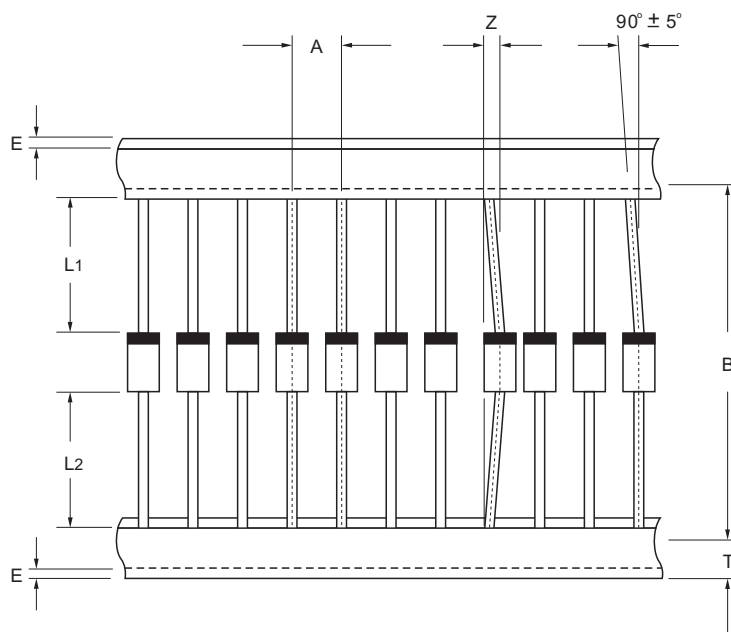
2. MARKING



3. TAPING

Axial lead devices are packed in accordance with EIA standard RS-296-E and specifications given below.

COMPONENT OUTLINE	COMPONENT PITCH A ± 0.5 mm	INTER TAPE PITCH B ± 1.5 mm	CUMULATIVE PITCH TOLERANCE
DO-35	5.0 mm	52.0 mm	2.0 mm / 20 pitch



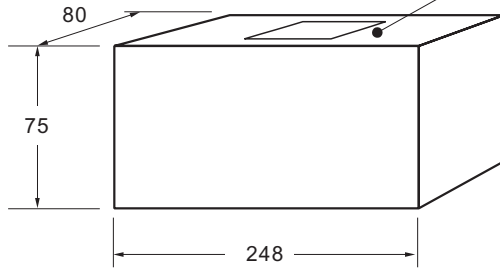
ITEM	SYMBOL	SPECIFICATIONS(mm)	SPECIFICATIONS(inch)
Component alignment	Z	1.2max	0.048max
Tape width	T	6.0±0.4	0.236±0.016
Exposed adhesive	E	0.8max	0.032max
Body eccentricity	L1-L2	1.0max	0.040max

NOTES:

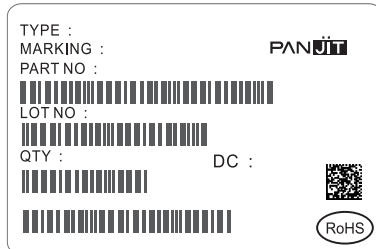
1. Each component lead shall be sandwiched between tapes for a minimum of 3.2mm (0.126")
2. The reel width ' w ' for 26mm taping is 5.0±1.0mm (1.97"±0.04")

4. PACKING

AMMUNITION PACKING

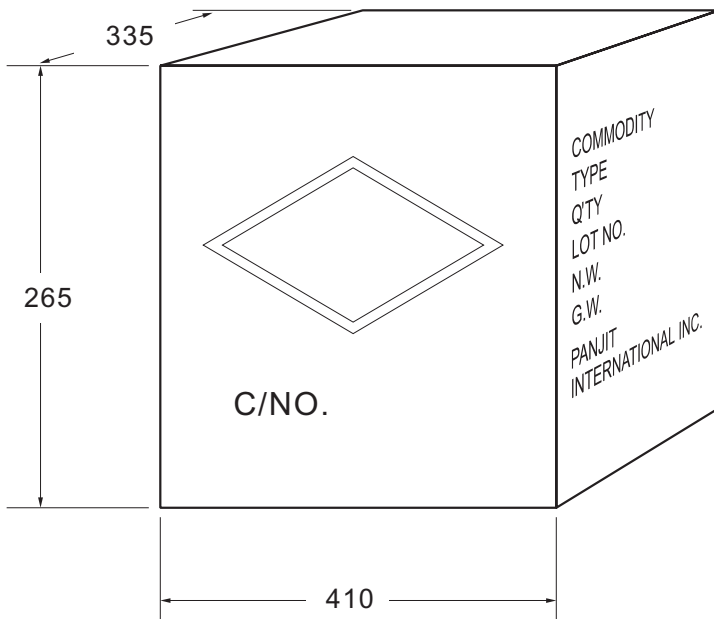


LABEL TYPE



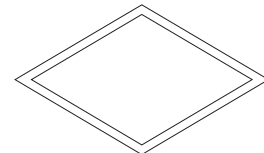
Box Dimensions : mm
Quantity per Box: 5,000 pcs

CARTON



Box Dimensions : mm
Quantity per Box: 100,000 pcs

SHIPPING MARK



C/NO.
PRODUCT COUNTRY

SIDE MARK

COMMODITY:
TYPE:
Q'TY:
LOT NO.
N.W.
G.W.
PANJIT
INTERNATIONAL INC.

Packing Specifications

Package	Reel Size	Reel	Component Space	Tape Space	Reel Dia	Carton Size	Carton	Approx. Gross Weight
	(inch)	(pcs)	(m/m)	(m/m)	(m/m)	(m/m)	(EA)	(Kg)
Reel Packing								
DFN 2L	7	8,000	2	8	178	390 x 270 x 400	640,000	8.6
DFN 3L	7	8,000	2	8	178	390 x 270 x 400	640,000	8.6
SOD-123	7	3,000	4	8	178	390 x 270 x 400	240,000	9.9
	13	10,000	4	8	330	375 x 360 x 213	120,000	6.5
SOD-123FL	7	3,000	4	8	178	390 x 270 x 400	240,000	10.6
	13	10,000	4	8	330	375 x 360 x 213	120,000	7.2
SOD-123HE	7	3,000	4	8	178	390 x 270 x 400	240,000	12.4
	13	10,000	4	8	330	375 x 360 x 213	120,000	8.1
SOD-323	7	5,000	4	8	178	390 x 270 x 400	400,000	9.4
	13	12,000	4	8	330	375 x 360 x 213	144,000	5.9
SOD-523	7	5,000	4	8	178	390 x 270 x 400	400,000	9.1
	13	12,000	4	8	330	375 x 360 x 213	144,000	5.4
SOD-723	7	8,000	2	8	178	390 x 270 x 400	640,000	8.5
SOD-923	7	8,000	2	8	178	390 x 270 x 400	640,000	7.7
SOT-23	7	3,000	4	8	178	390 x 270 x 400	240,000	9.8
	13	12,000	4	8	330	375 x 360 x 213	144,000	7
SOT-23 (ESD)	7	3,000	4	8	178	455 x 270 x 440	240,000	9.9
SOT-23 5L	7	3,000	4	8	178	390 x 270 x 400	240,000	14.5
	13	10,000	4	8	330	375 x 360 x 213	120,000	7.9
SOT-23 6L	7	3,000	4	8	178	390 x 270 x 400	240,000	14.5
	13	10,000	4	8	330	375 x 360 x 213	120,000	7.9
SOT-323	7	3,000	4	8	178	390 x 270 x 400	240,000	7.9
	13	12,000	4	8	330	375 x 360 x 213	144,000	6.1
SOT-323 (ESD)	7	3,000	4	8	178	455 x 270 x 440	240,000	9.4
SOT-353	7	3,000	4	8	178	390 x 270 x 400	240,000	10
	13	10,000	4	8	330	375 x 360 x 213	120,000	7.2
SOT-363	7	3,000	4	8	178	390 x 270 x 400	240,000	10.2
	13	10,000	4	8	330	375 x 360 x 213	120,000	7.1
SOT-363 (ESD)	7	3,000	4	8	178	455 x 270 x 440	240,000	10
SOT-523	7	4,000	4	8	178	390 x 270 x 400	320,000	10
SOT-543	7	4,000	4	8	178	390 x 270 x 400	320,000	9.4
	13	10,000	4	8	330	375 x 360 x 213	120,000	5.2
SOT-553	7	4,000	4	8	178	390 x 270 x 400	320,000	9.4
	13	10,000	4	8	330	375 x 360 x 213	120,000	5.2
SOT-563	7	4,000	4	8	178	390 x 270 x 400	320,000	9.4
	13	10,000	4	8	330	375 x 360 x 213	120,000	5.2
SOIC-08	13	3,000	8	12	330	375 x 360 x 213	48,000	14.2

Packing Specifications

Package	Reel Size	Reel	Component Space	Tape Space	Reel Dia	Carton Size	Carton	Approx. Gross Weight
	(inch)	(pcs)	(m/m)	(m/m)	(m/m)	(m/m)	(EA)	(Kg)
Reel Packing								
A-405	-	5,000	5	52	330	340 x 340 x 410	25,000	7.79
DO-15	-	4,000	5	52	330	340 x 340 x 410	20,000	11.4
DO-201AD	-	1,250	10	52	330	340 x 340 x 410	6,250	9.2
DO-201AE	-	1,250	10	52	330	340 x 340 x 410	6,250	9.2
DO-34	15	10,000	5	52	360	360 x 360 x 395	50,000	10.1
DO-35	15	10,000	5	52	360	360 x 360 x 395	50,000	11.2
DO-41	-	5,000	5	52	330	340 x 340 x 410	25,000	10.2
DO-41G	15	5,000	5	52	360	360 x 360 x 395	25,000	10.9
MDI	13	3,000	8	12	330	375 x 360 x 390	48,000	14.7
MELF/DL-41	7	1,500	4	-	178	385 x 380 x 260	84,000	18.3
	13	5,000	4	-	330	360 x 360 x 395	100,000	23.5
MICRO-MELF	7	2,500	4	-	178	385 x 380 x 260	200,000	9.3
	13	10,000	4	-	330	360 x 360 x 395	200,000	11.5
MINI-MELF/LL-34	7	2500	4	-	178	385 x 380 x 260	200,000	12.7
	13	10,000	4	-	330	360 x 360 x 395	200,000	14.6
MICRO DIP/TDI	7	1000	8	12	178	390 x 240 x 420	40,000	9.5
	13	4000	8	12	330	375 x 360 x 390	64,000	17
P-600	-	800	10	52	330	340 x 340 x 410	4,000	9.9
QUADRO-MELF	13	10,000	4	-	330	360 x 360 x 395	200,000	14.9
	7	2,500	4	-	178	385 x 380 x 260	200,000	13.3
R-1	-	5,000	5	52	330	340 x 340 x 410	25,000	7.8
SDIP	13	1,500	12	16	330	375 x 360 x 390	21,000	14.3
SMA(W)	7	1,800	4	12	178	390 x 240 x 420	100,800	13
	13	7,500	4	12	330	355 x 355 x 400	150,000	20.4
SMA/DO-214AC	7	1,800	4	12	178	390 x 240 x 420	72,000	10
	13	7,500	4	12	330	375 x 360 x 390	120,000	17.4
SMB/DO-214AA	7	500	8	12	178	390 x 240 x 420	20,000	6.5
	13	3,000	8	12	330	375 x 360 x 390	48,000	13.2
SMC/DO-214AB	7	500	8	16	178	390 x 240 x 420	15,000	8.4
	13	3,000	8	16	330	375 x 360 x 390	42,000	18
TO-252/DPAK	13	3,000	8	16	330	375 x 360 x 390	42,000	18.8
TO-263/D ² PAK	13	800	16	24	330	375 x 360 x 390	6,400	14.5

Packing Specifications

Package	Inner Box Size	Box	Carton Size	Carton	Approx. Gross Weight
	(m/m)	(EA)	(m/m)	(EA)	(Kg)
Bulk Packing					
A-405	198 x 84 x 20	1,000	459 x 214 x 256	50,000	12.7
DO-15	200 x 85 x 25	1,000	459 x 214 x 256	40,000	20.7
DO-201AD	200 x 85 x 40	500	459 x 214 x 256	12,500	16
DO-201AE	200 x 85 x 40	500	495 x 214 x 256	12,500	16
DO-34	240 x 100 x 90	2,000	406 x 335 x 257	120,000	14.5
DO-35	240 x 100 x 90	2,000	406 x 335 x 257	120,000	17.1
DO-41	198 x 84 x 20	1,000	459 x 214 x 256	50,000	19.3
DO-41G	240 x 100 x 90	1,000	406 x 335 x 257	60,000	18.5
DIP	-	-	459 x 214 x 256	12,000	6.5
SDIP	-	-	459 x 214 x 256	24,000	15.7
R-1	198 x 84 x 20	1,000	459 x 214 x 256	50,000	12.7
P-600	208 x 90 x 83	500	459 x 214 x 256	5,000	11.3
ITO-220	540 x 145 x 85	2,000	555 x 306 x 200	8,000	20.5
TO-220	540 x 145 x 85	2,000	555 x 306 x 200	8,000	22.9
TO-251AB/DPAK	540 x 145 x 85	8,400	555 x 306 x 200	33,600	22
TO-3P/TO-247AD	-	-	530 x 243 x 100	1,500	13.9
TO-3PS/TO-247S	-	-	511 x 243 x 107	1,500	12.2

Package	Ammo	Component Space	Tape Space	Inner Box Size	Carton Size	Carton	Approx. Gross Weight
	(pcs)	(m/m)	(m/m)	(m/m)	(m/m)	(EA)	(Kg)
Ammunition Packing							
A-405	5,000	5	26	255 x 47 x 150	339 x 276 x 330	60,000	12.4
A-405	5,000	5	52	255 x 75 x 150	339 x 276 x 330	40,000	16
DO-15	3,000	5	52	255 x 75 x 150	339 x 276 x 330	24,000	13.3
DO-201AD	1,250	10	52	255 x 47 x 122	339 x 276 x 330	10,000	13.4
DO-201AE	1,250	10	52	255 x 47 x 122	339 x 276 x 330	10,000	13.4
DO-34	5,000	5	26	248 x 80 x 48	406 x 335 x 257	150,000	14.5
DO-34	5,000	5	52	248 x 80 x 75	406 x 335 x 257	100,000	12.7
DO-35	5,000	5	26	248 x 80 x 48	406 x 335 x 257	150,000	16.7
DO-35	5,000	5	52	248 x 80 x 75	406 x 335 x 257	100,000	15.2
DO-41	5,000	5	52	255 x 75 x 150	339 x 276 x 330	40,000	13.5
DO-41G	2,500	5	26	248 x 80 x 48	406 x 335 x 257	75,000	17.1
DO-41G	2,500	5	52	248 x 80 x 75	406 x 335 x 257	50,000	15.6
P-600	400	10	52	255 x 47 x 122	339 x 276 x 330	3,200	8.1
R-1	3,000	5	26	255 x 47 x 73	310 x 268 x 170	36,000	6.3
R-1	3,000	5	52	255 x 73 x 73	310 x 268 x 170	24,000	6.2
R-1	5,000	5	52	255 x 73 x 122	339 x 276 x 274	40,000	10.1