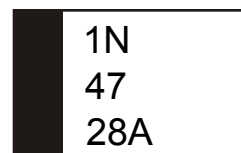


PRIMARY CHARACTERISTICS	
P_D	1W
V_Z	3.3V~75V
I_{ZT}	See Page 2
$T_{J,Max}$	150°C

DO-41G PACKAGE

Marking Code : Please see Page 2
 Ex : 1N4728A



FEATURES

- Low profile package
- Built-in strain relief
- Low inductance
- High temperature soldering : 260°C /10 seconds at terminals
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded Glass,DO-41G
- Polarity : As Above Marked
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Units
Power Dissipation at Tamb = 25 °C	P_{TOT}	1*	W
Operating Junction Temperature	T_J	-55 to + 150	°C
Storage Temperature Range	T_{STG}	-55 to + 150	°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}	--	--	170*	K/W
Forward Voltage at IF = 200mA	VF	--	--	1.2	V

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



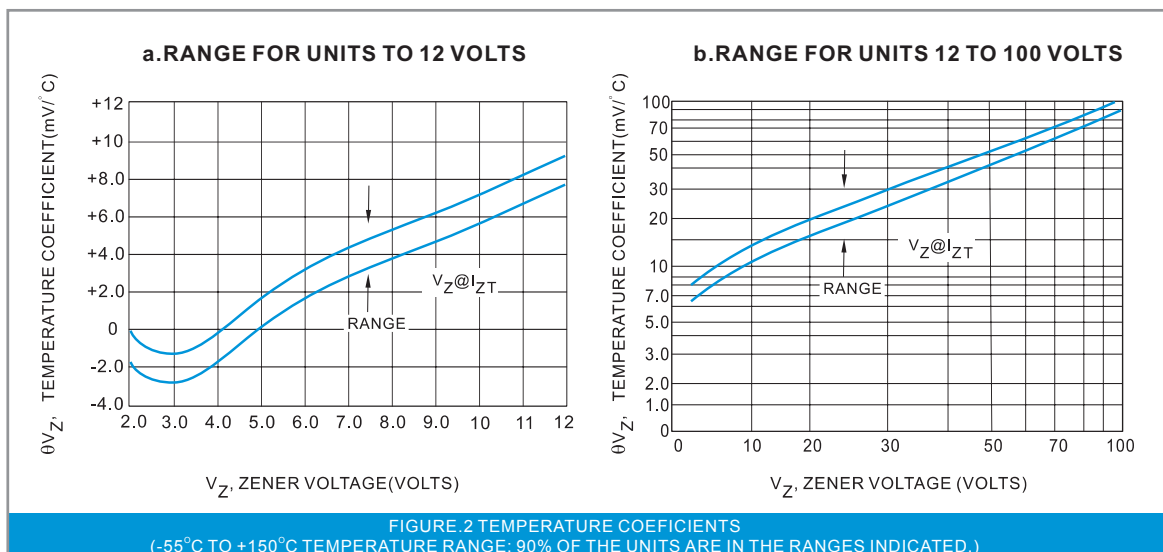
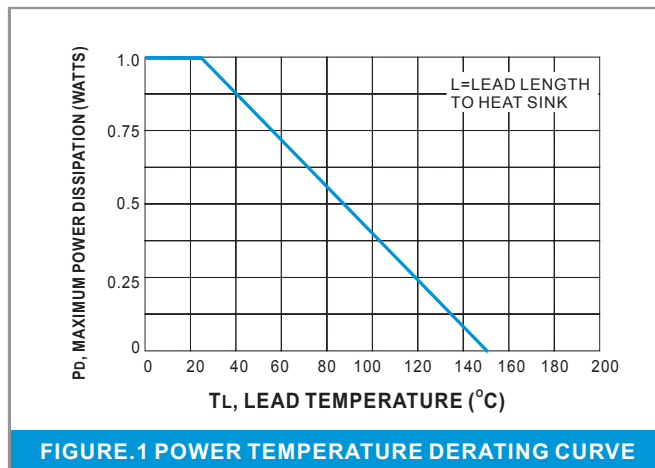
Part Number	Nominal Zener Voltage			Max. Zener Impedance				Maximum Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
1.0 Watt Zener Diodes										
1N4728A	3.3	3.14	3.47	10.0	76.00	400	1.00	100	1	1N4728A
1N4729A	3.6	3.42	3.78	10.0	69.00	400	1.0	100	1	1N4729A
1N4730A	3.9	3.71	4.10	9.0	64.00	400	1.0	50	1	1N4730A
1N4731A	4.3	4.09	4.52	9.0	58.00	400	1.0	10	1	1N4731A
1N4732A	4.7	4.47	4.94	8.0	53.00	500	1.0	10	1	1N4732A
1N4733A	5.1	4.85	5.36	7.0	49.00	550	1.0	10	1	1N4733A
1N4734A	5.6	5.32	5.88	5.0	45.00	600	1.0	10	2	1N4734A
1N4735A	6.2	5.89	6.51	2.0	41.00	700	1.0	10	3	1N4735A
1N4736A	6.8	6.46	7.14	3.5	37.00	700	1.0	10	4	1N4736A
1N4737A	7.5	7.13	7.88	4.0	34.00	700	0.5	10	5	1N4737A
1N4738A	8.2	7.79	8.61	4.5	31.00	700	0.5	10	6	1N4738A
1N4739A	9.1	8.65	9.56	5.0	28.00	700	0.5	10	7	1N4739A
1N4740A	10.0	9.50	10.50	7.0	25.00	700	0.25	10	7.6	1N4740A
1N4741A	11.0	10.45	11.55	8.0	23.00	700	0.25	5	8.4	1N4741A
1N4742A	12.0	11.40	12.60	9.0	21.00	700	0.25	5	9.1	1N4742A
1N4743A	13.0	12.35	13.65	10	19.00	700	0.25	5	9.9	1N4743A
1N4744A	15.0	14.25	15.75	14	17.00	700	0.25	5	11.4	1N4744A
1N4745A	16.0	15.20	16.80	16	15.50	700	0.25	5	12.2	1N4745A
1N4746A	18.0	17.10	18.90	20	14.00	750	0.25	5	13.7	1N4746A
1N4747A	20.0	19.00	21.00	22	12.50	750	0.25	5	15.2	1N4747A
1N4748A	22.0	20.90	23.10	23	11.50	750	0.25	5	16.7	1N4748A
1N4749A	24.0	22.80	25.20	25	10.50	750	0.25	5	18.2	1N4749A
1N4750A	27.0	25.65	28.35	35	9.50	750	0.25	5	20.6	1N4750A
1N4751A	30.0	28.50	31.50	40	8.50	1000	0.25	5	22.8	1N4751A
1N4752A	33.0	31.35	34.65	45	7.50	1000	0.25	5	25.1	1N4752A
1N4753A	36.0	34.20	37.80	50	7.00	1000	0.25	5	27.4	1N4753A
1N4754A	39.0	37.05	40.95	60	6.50	1000	0.25	5	29.7	1N4754A
1N4755A	43.0	40.85	45.15	70	6.00	1500	0.25	0.1	32.7	1N4755A
1N4756A	47.0	44.65	49.35	80	5.50	1500	0.25	0.1	35.8	1N4756A
1N4757A	51.0	48.45	53.55	95	5.00	1500	0.25	0.1	38.8	1N4757A
1N4758A	56.0	53.20	58.80	110	4.50	2000	0.25	0.1	42.6	1N4758A
1N4759A	62.0	58.90	65.10	125	4.00	2000	0.25	0.1	47.1	1N4759A
1N4760A	68.0	64.60	71.40	150	3.70	2000	0.25	0.1	51.7	1N4760A
1N4761A	75.0	71.25	78.75	175	3.30	2000	0.25	0.1	56	1N4761A



NOTE:

1. Tolerance and Type Number Designation. The type numbers listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$
2. Specials Available Include:
 - A. Nominal zener voltages between the voltages shown and tighter voltage tolerances.
 - B. Matched sets.
3. Zener Voltage (V_Z) Measurement. Guarantees the zener voltage when measured at 90 seconds while maintaining the lead temperature (T_L) at $30^\circ\text{C} \pm 1^\circ\text{C}$, from the diode body.
4. Zener Impedance (Z_Z) Derivation. The zener impedance is derived from the 60 cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} .
5. Surge Current (I_R) Non-Repetitive. The rating listed in the electrical characteristics table is maximum peak, non-repetitive, reverse surge current of 1/2

RATING AND CHARACTERISTICS CURVES



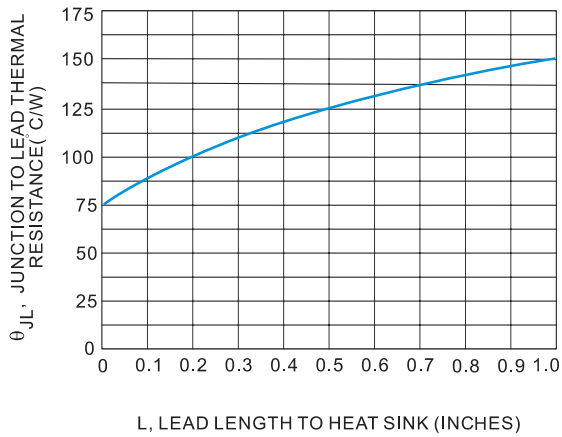


FIGURE.3 TYPICAL THERMAL RESISTANCE versus LEAD LENGTH

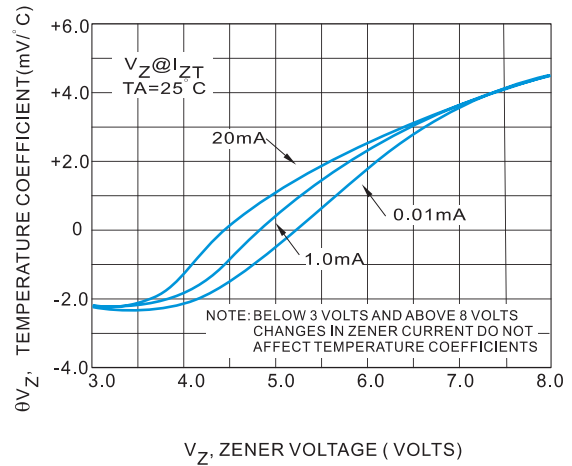
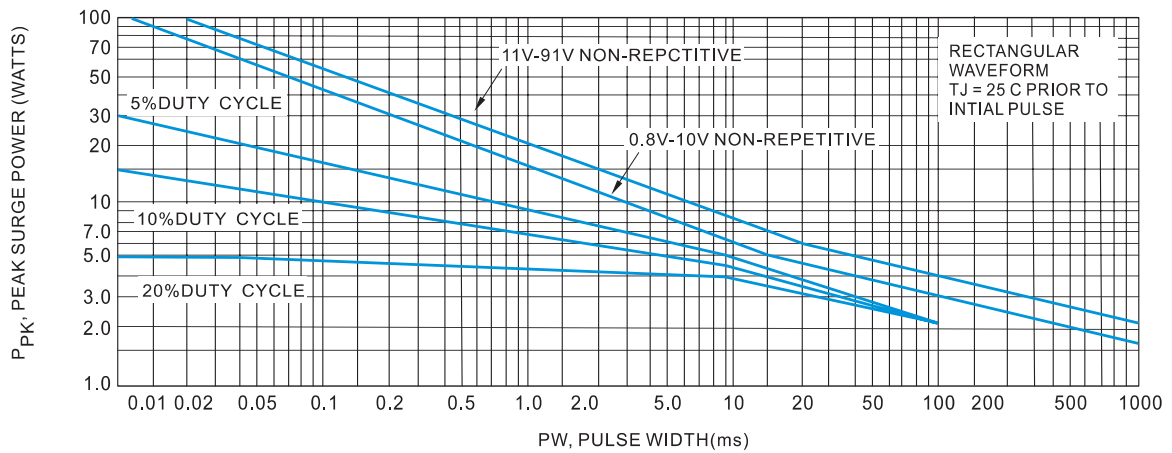


FIGURE.4 EFFECT OF ZENER CURRENT



This graph represents 90 percentile data points.
FOR worst-case design characteristics, multiply surge power by 2/3

FIGURE.5 MAXIMUM SURGE POWER

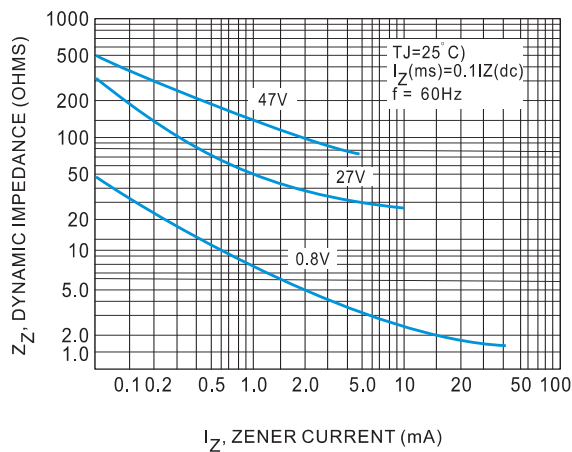


FIGURE.6 EFFECT OF ZENER CURRENT ON ZENER IMPEDANCE

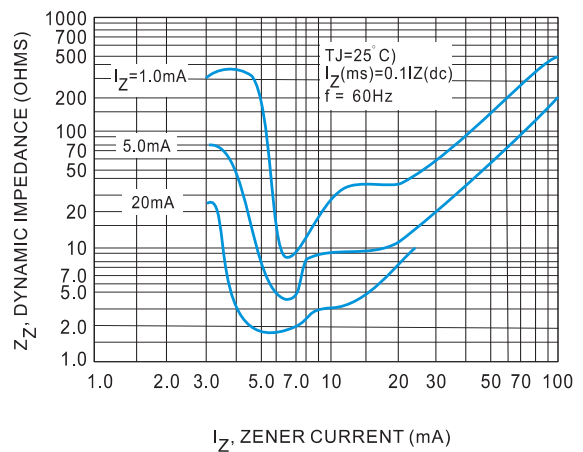


FIGURE.7 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

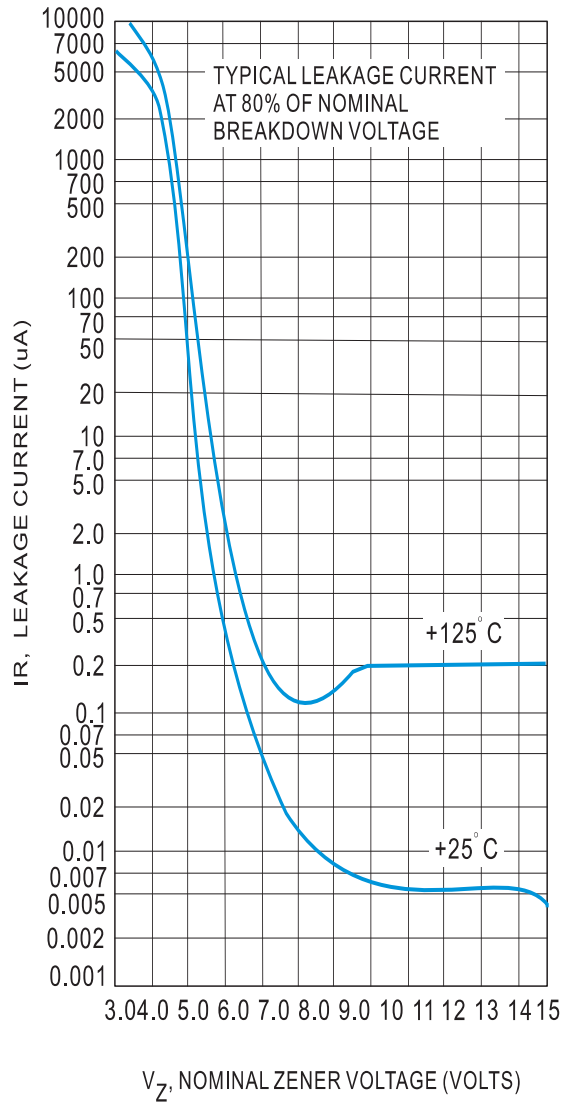


FIGURE.8 TYPICAL LEAKAGE CURRENT

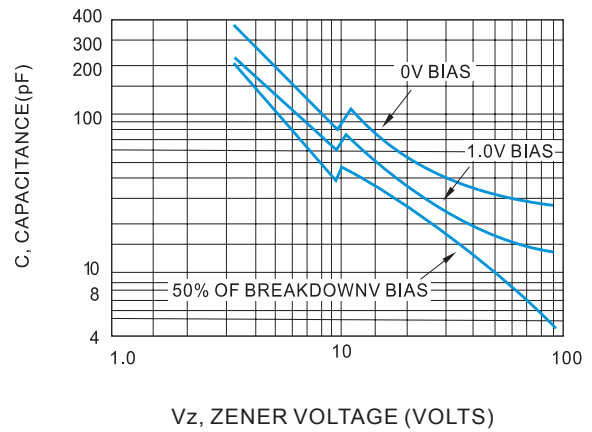


FIGURE.9 TYPICAL CAPACITANCE versus V_Z

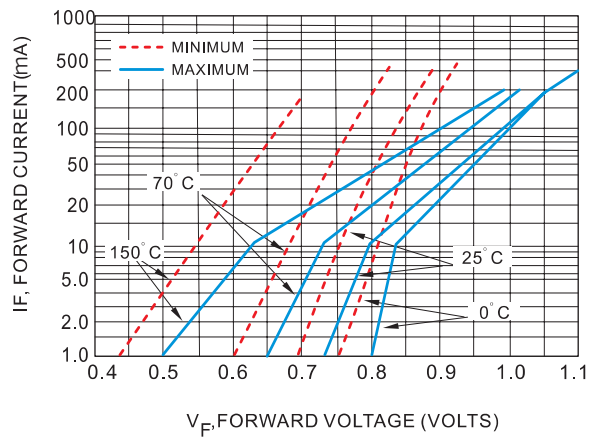
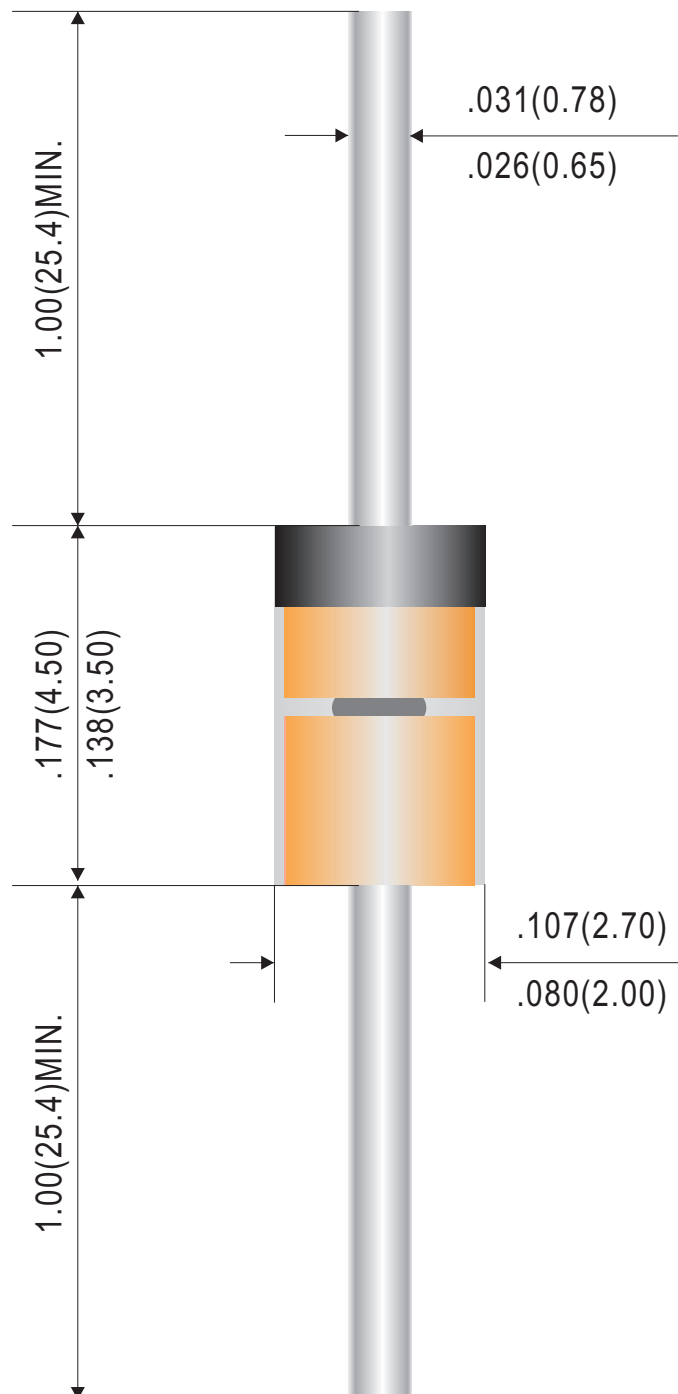


FIGURE.10 TYPICAL FORWARD CHARACTERISTICS



Outline Drawing

DO-41G



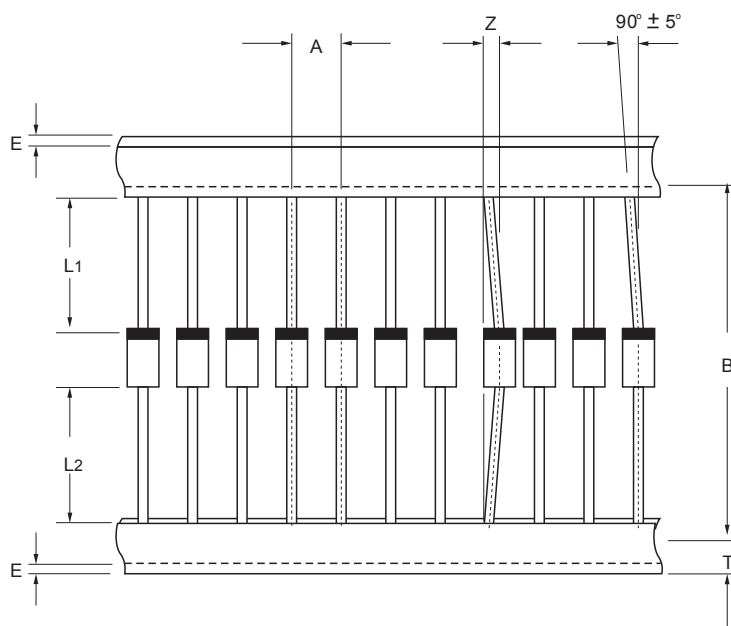
Dimensions in inches and (millimeters)

Rev.B

PACKAGE	INNER BOX SIZE (m/m)	BOX EA	CARTON SIZE (m/m)	CARTON EA
DO-41G	248X80X48	2500	460X335X257	50,000

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-41G	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:

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

Ordering Information:

Device PN	Packing
t łóú bŸΨöŞo -T ⁽¹⁾ G ⁽²⁾ -WS	Tape & Ammo Pack box:2.5 Kpcs/box

Note: (1) Packing code, Tape & Ammo Pack box

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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