



SOT-553 Plastic-Encapsulate Diodes

CJ6V8L ZENER DIODE

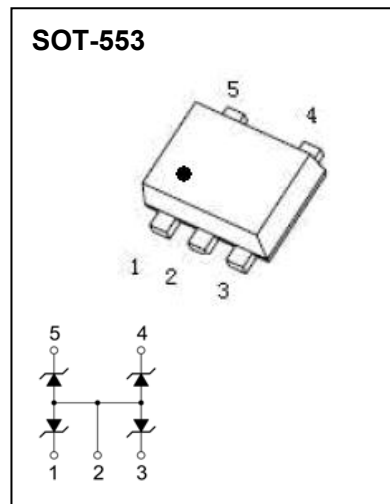
FEATURES

- The output voltage can be to 6.8V
- Ultra small mold type

APPLICATIONS

- Voltage regulation

MARKING: D6F



MAXIMUM RATINGS(Operating temperature range applies unless otherwise specified)

Symbol	Parameter	Value	Unit
V_Z	Zener Voltage	6.8(Type)	V
P_D	Power Dissipation(Note 1)	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	833	$^{\circ}C/W$
T_j	Operating Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~+150	$^{\circ}C$

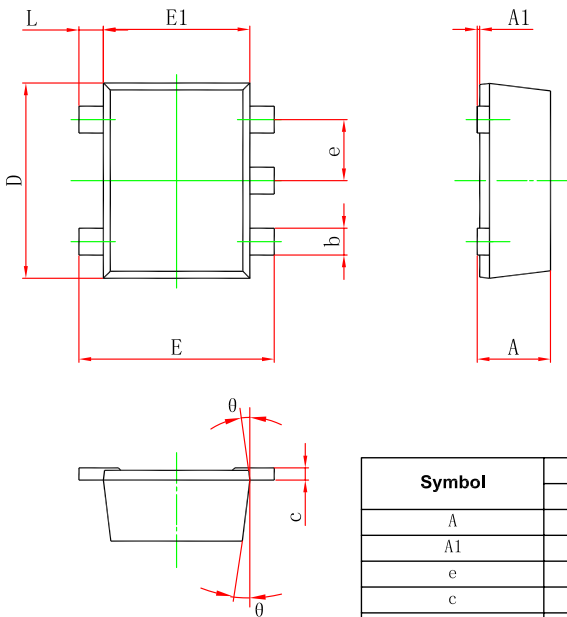
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Zener Voltage Range (Note 2)	V_Z	$I_{ZT}=5mA$	6.47		7.14	V
Maximum Zener Impedance	Z_{ZT}	$I_{ZT}=5mA$			5	Ω
	Z_{Zk}	$I_{Zk}=0.5mA$		30		
Maximum Reverse Current (Note 2)	I_R	$V_R=3.5V$			0.5	μA
Forward Voltage	V_F	$I_F=10mA$			1	V
Total Capacitance	C_{tot}	$V_R=0V, f=1MHz$			20	pF

Notes: 1. Total of 2 elements.

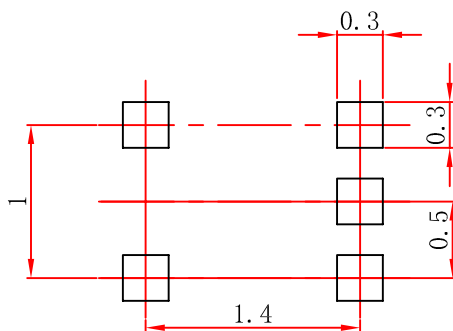
2.Short duration test pulse used to minimize self-heating effect.

SOT-553 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.525	0.600	0.021	0.024
A1	0.000	0.050	0.000	0.002
e	0.450	0.550	0.018	0.022
c	0.090	0.160	0.004	0.006
D	1.500	1.700	0.059	0.067
b	0.170	0.270	0.007	0.011
E1	1.100	1.300	0.043	0.051
E	1.500	1.700	0.059	0.067
L	0.100	0.300	0.004	0.012
θ	7 ⁰ REF.		7 ⁰ REF.	

SOT-553 Suggested Pad Layout



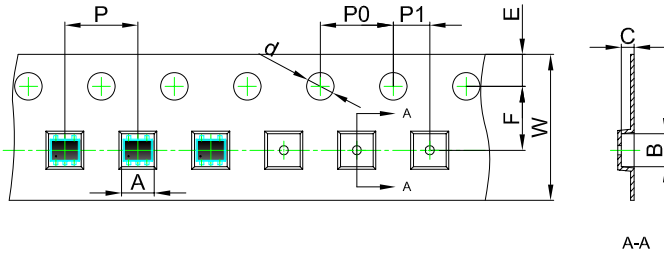
Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

SOT-553 Embossed Carrier Tape

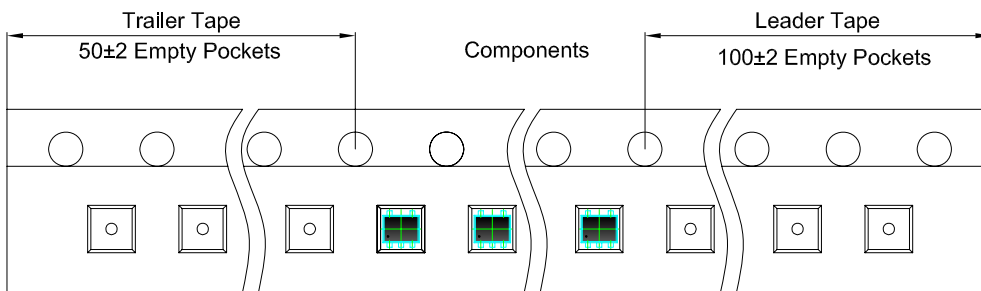


Packaging Description:

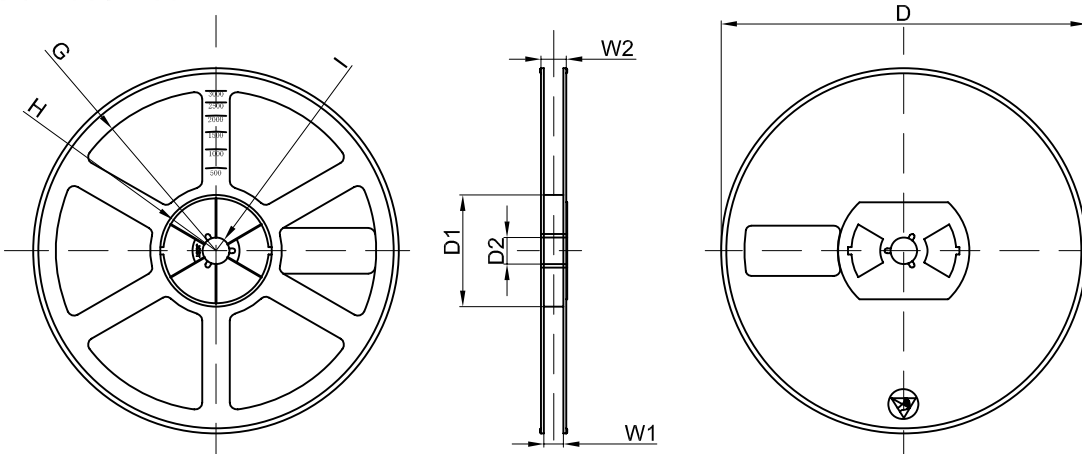
SOT-553 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-553	1.78	1.78	0.69	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1

SOT-553 Tape Leader and Trailer



SOT-553 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	