

Plastic-Encapsulate Switching Diode
PRIMARY CHARACTERISTICS

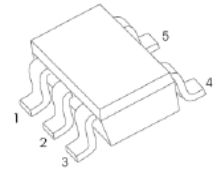
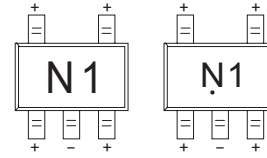
P_D	150mW
V_R	80V
I_O	25mA
$T_{J,Max}$	150°C

FEATURES

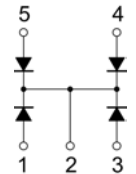
- Multiple Diodes in One Small Surface Mount Package
- Diode Characteristics are Matched in the Package
- Moisture Sensitivity Level 1

TO-353 PACKAGE

Marking : N1



Solid dot = Green molding compound device, if none, the normal device.


MECHANICAL DATA

- Case : Molded plastic, TO-353
- Polarity : Shown above
- Terminals : Plated terminals, solderable per MIL-STD-750, Method 2026
- Epoxy : UL94-V0 rated flame retardant

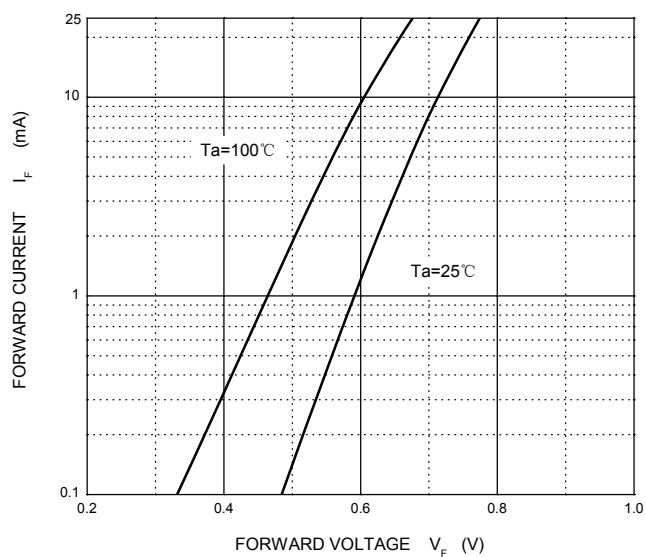
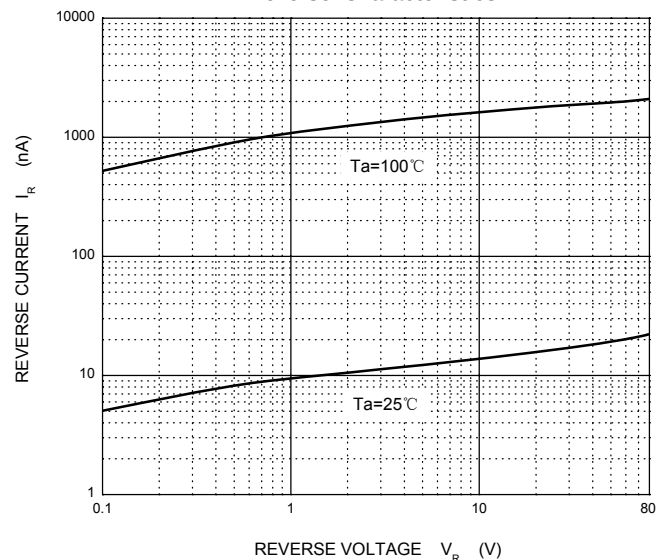
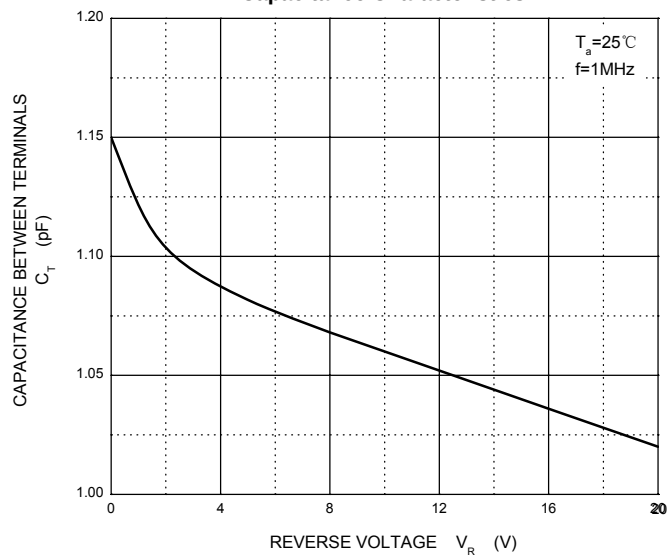
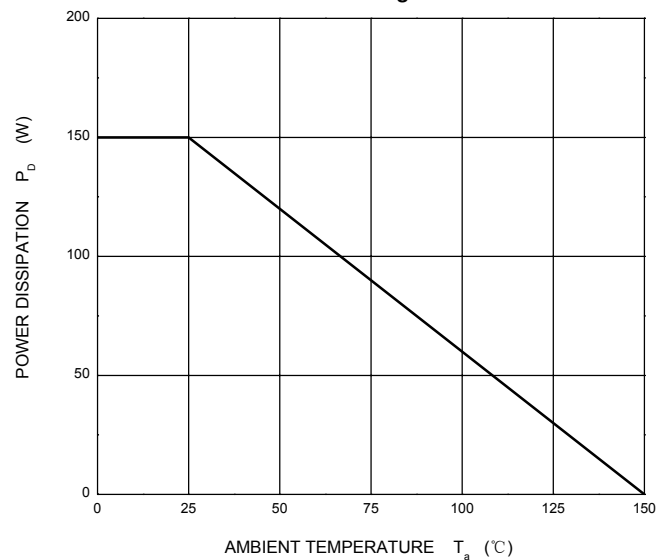
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_R	Continuous Reverse Voltage	80	V
I_O	Continuous Forward Current	25	mA
I_{FM}	Peak Forward Current	80	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	0.25	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	833	°C/W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

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

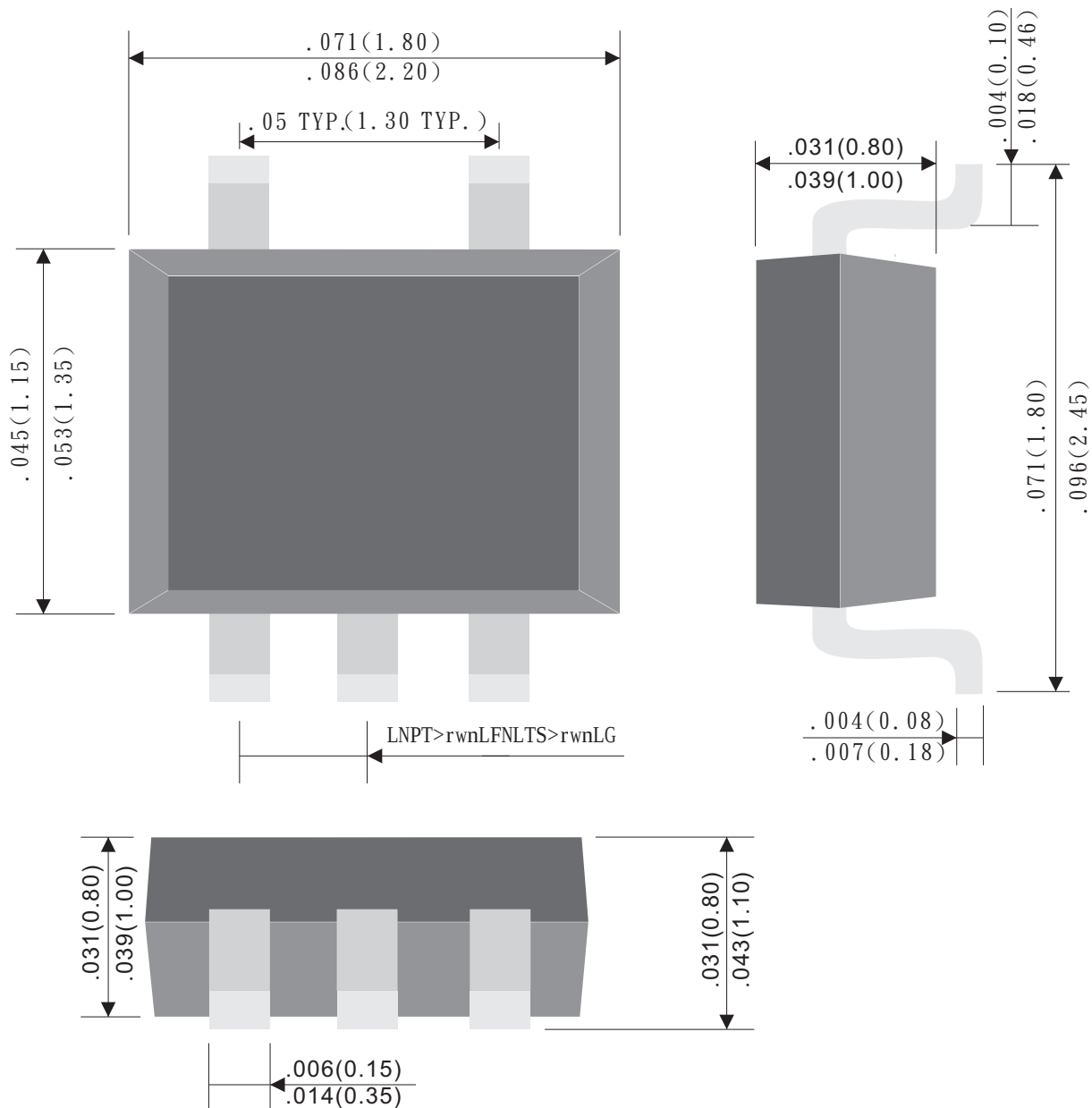
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	80			V
Reverse current	I_R	$V_R=70\text{V}$			0.1	μA
Forward voltage	V_F	$I_F=5\text{mA}$			0.9	V
Total capacitance	C_{tot}	$V_R=6\text{V}, f=1\text{MHz}$			3.5	pF
Reverse recovery time	t_{rr}	$I_F=I_R=5\text{mA}, V_R=6\text{V}, R_L=50\Omega$			4	ns

Typical Characteristics

Forward Characteristics

Reverse Characteristics

Capacitance Characteristics

Power Derating Curve


Outline Drawing

SOT-353

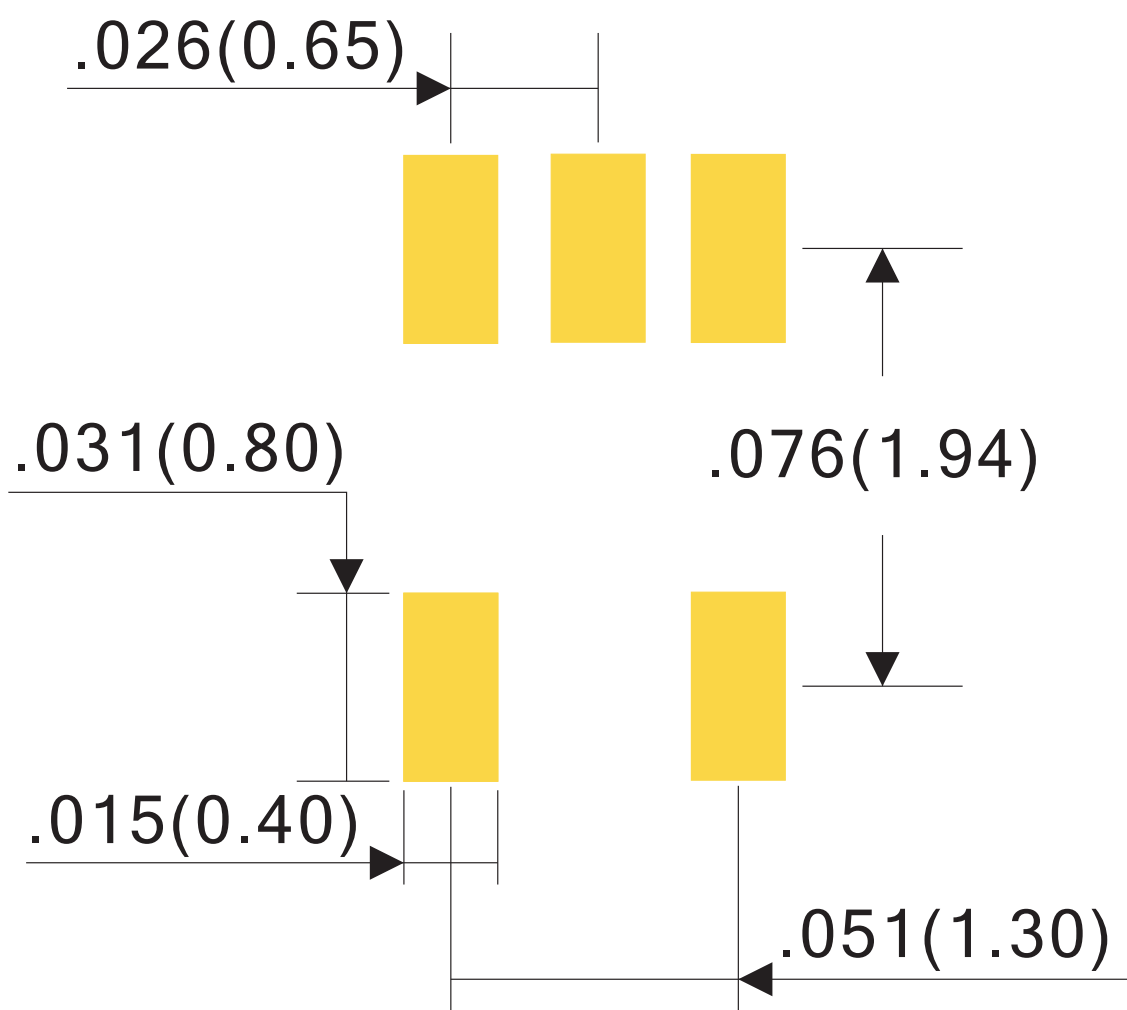


Dimensions in inches and (millimeters)

Rev.C

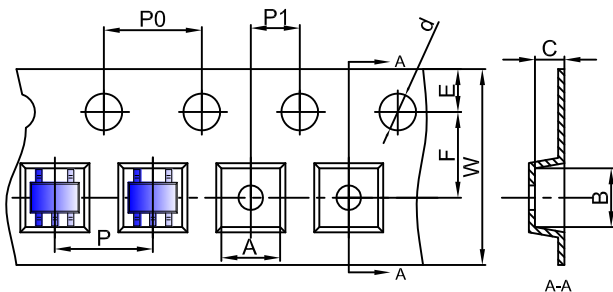
Suggested Soldering Pad Layout

SOT-353



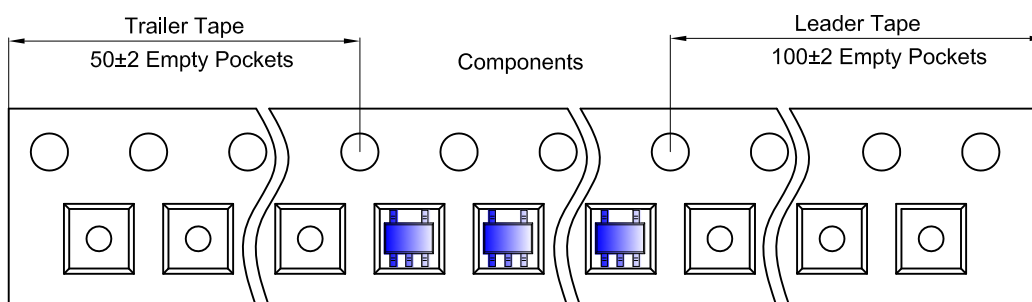
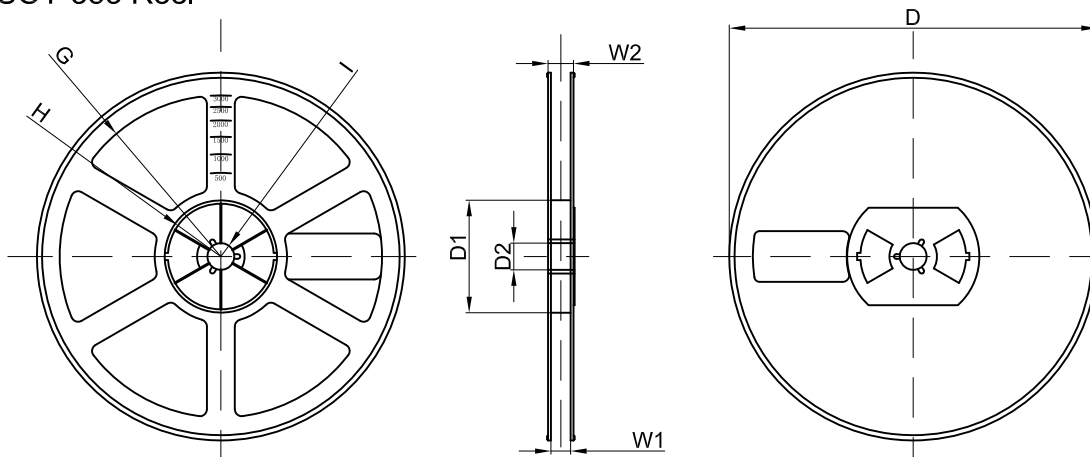
Dimensions in inches and (millimeters)

RevA

Plastic-Encapsulate Switching Diode
SOT-353 Embossed Carrier Tape

Packaging Description:

SOT-353 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-353	2.25	2.55	1.20	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00	

SOT-353 Tape Leader and Trailer

SOT-353 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

Plastic-Encapsulate Switching Diode**Ordering Information:**

Device PN	Packing
UMN1N -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

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

(3) WS : Willas brand abbreviation, Label Type does not display

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