

PRIMARY CHARACTERISTICS

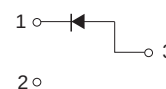
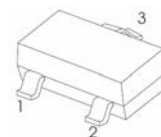
V_R	80V
I_O	100mA
$V_F@I_F=100mA$	1.2V
$T_{J,Max}$	150°C

FEATURES

- Low forward voltage
- Fast reverse recovery time
- Moisture Sensitivity Level 1

SOT-23 PACKAGE

MARKING: D3•



MECHANICAL DATA

- Case : Molded plastic,SOT-23
- Polarity : Shown above
- Terminals :Plated terminals,
solderable per MIL-STD-750,Method
2026
- Epoxy : UL94-V0 rated flame
retardant

Maximum Ratings @Ta=25°C

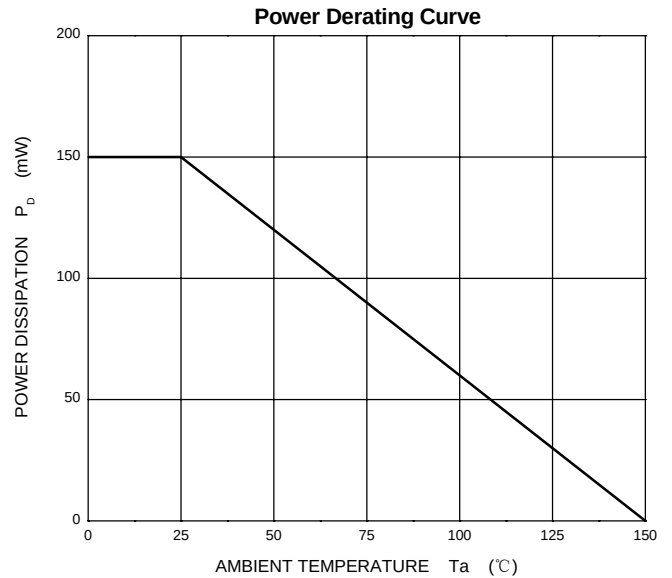
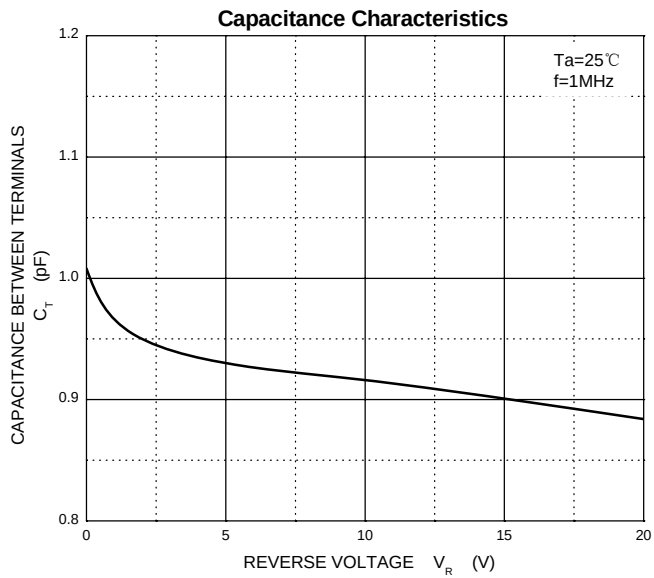
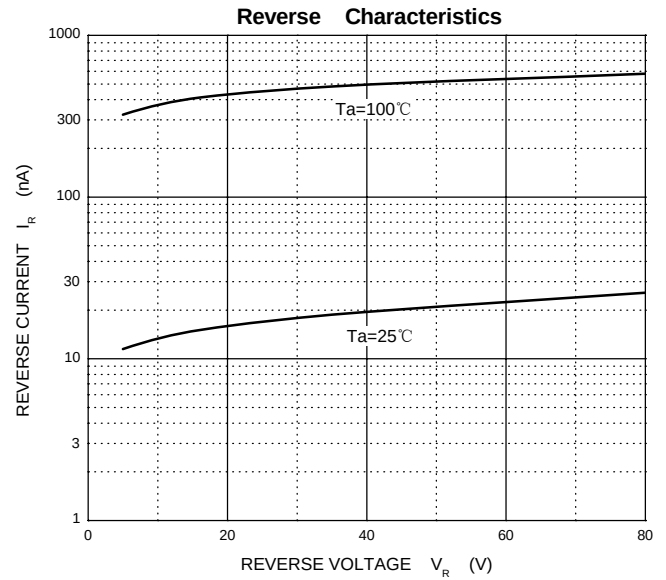
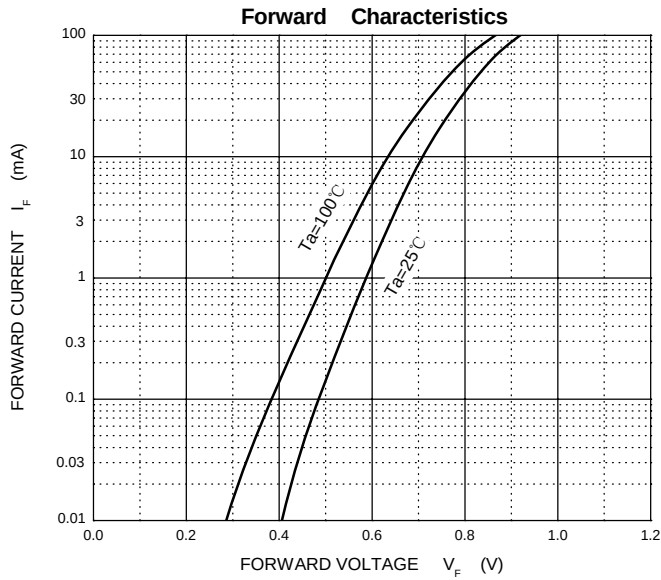
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	85	V
DC Blocking Voltage	V_R	80	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	100	mA
Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	833	°C/W
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

Electrical Characteristics @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	80			V	$I_R=100\mu A$
Forward voltage	V_{F1}		0.61		V	$I_F=1mA$
	V_{F2}		0.74		V	$I_F=10mA$
	V_{F3}		0.92	1.2	V	$I_F=100mA$
Reverse current	I_{R1}			0.1	μA	$V_R=30V$
	I_{R2}			0.5	μA	$V_R=80V$
Capacitance between terminals	C_T		2.2	4.0	pF	$V_R=0, f=1MHz$
Reverse recovery time	t_{rr}		1.6	4.0	ns	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R$



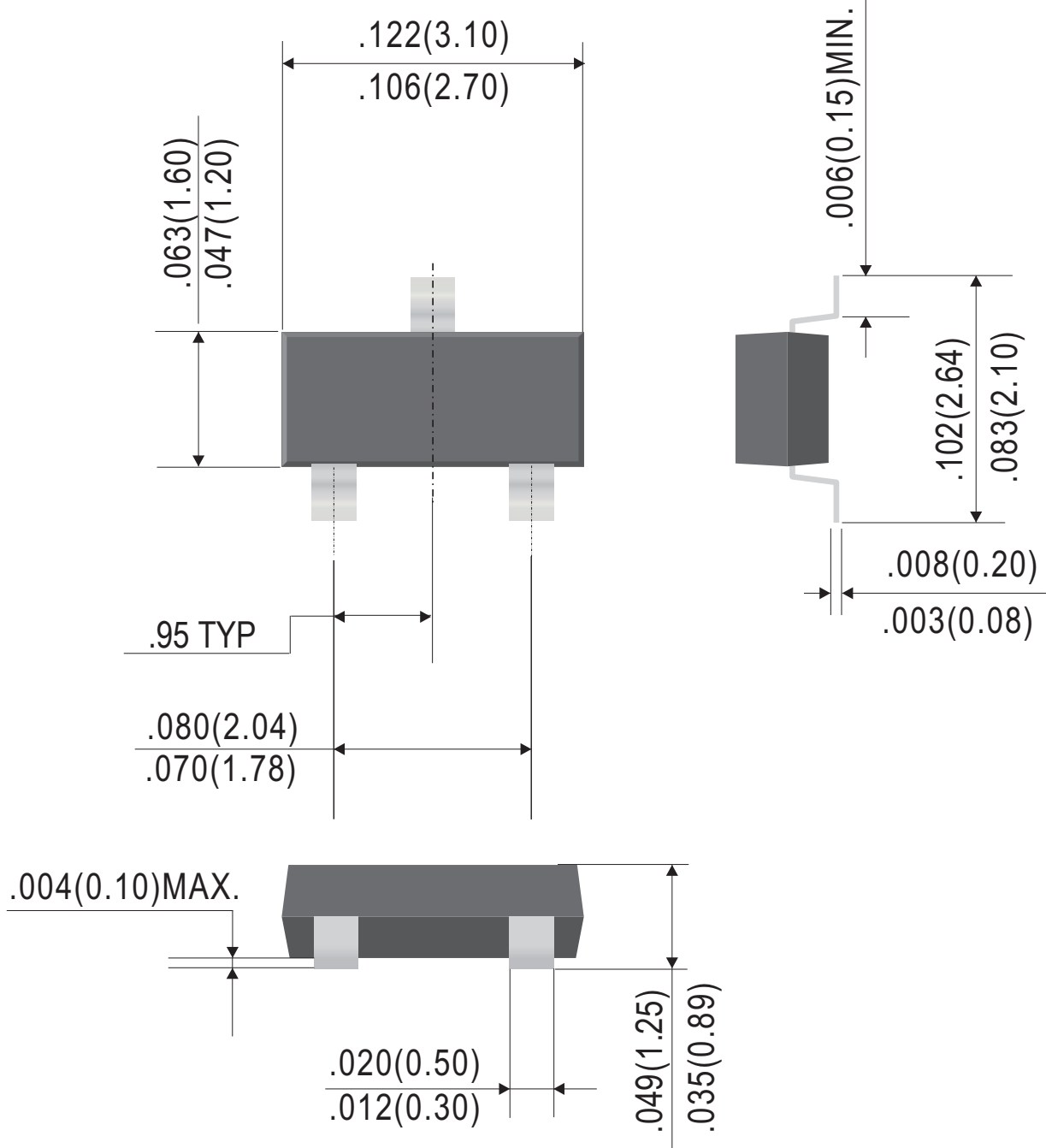
Typical Characteristics





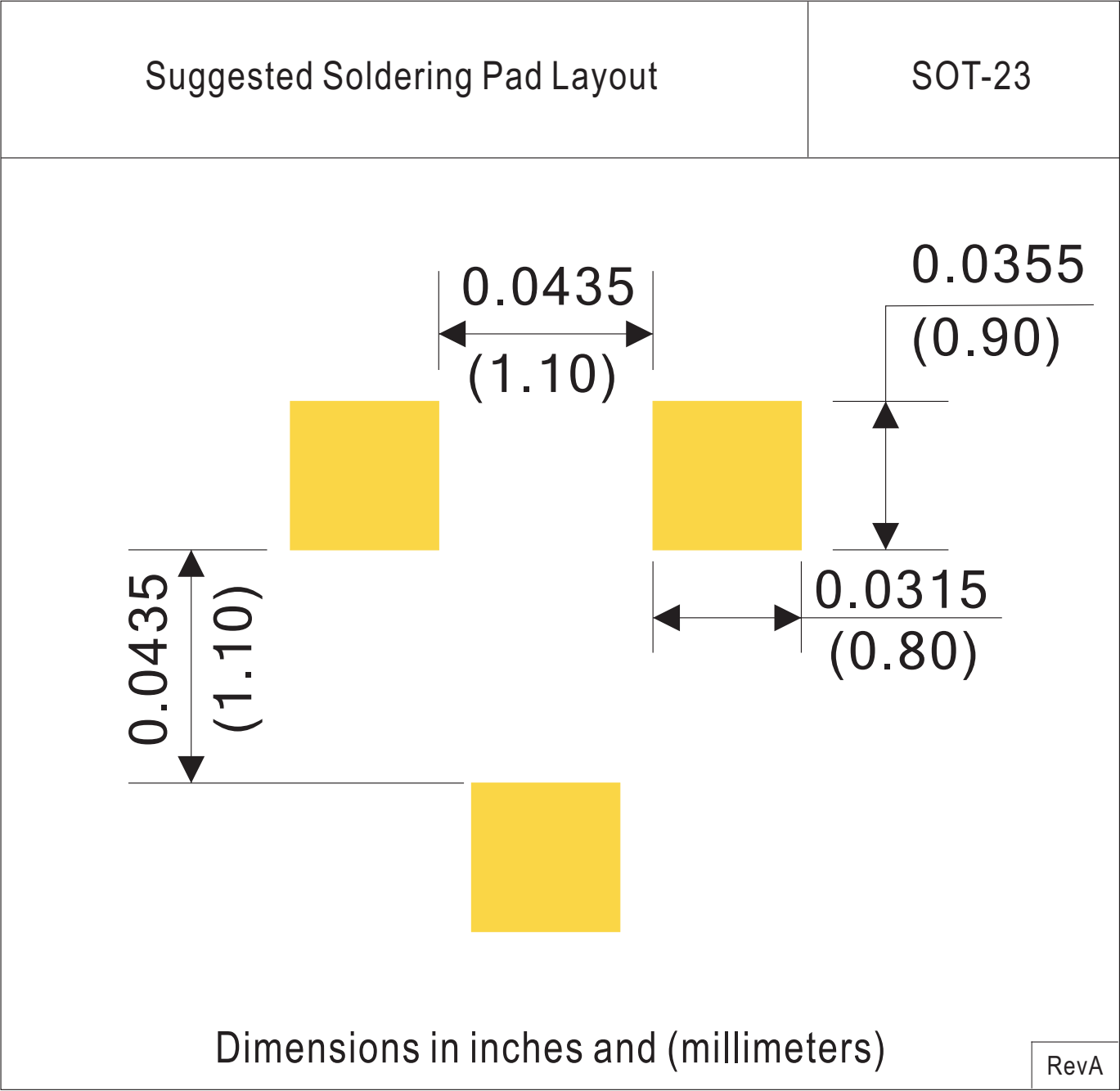
Outline Drawing

SOT-23

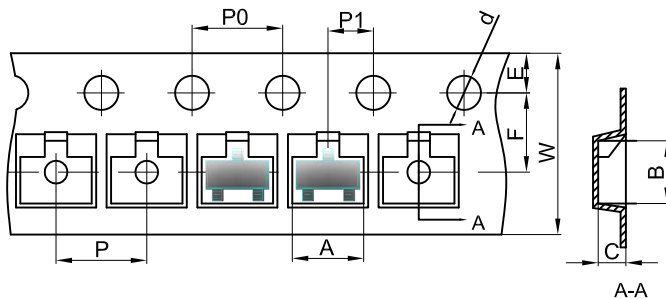


Dimensions in inches and (millimeters)

Rev.E



SOT-23 Embossed Carrier Tape

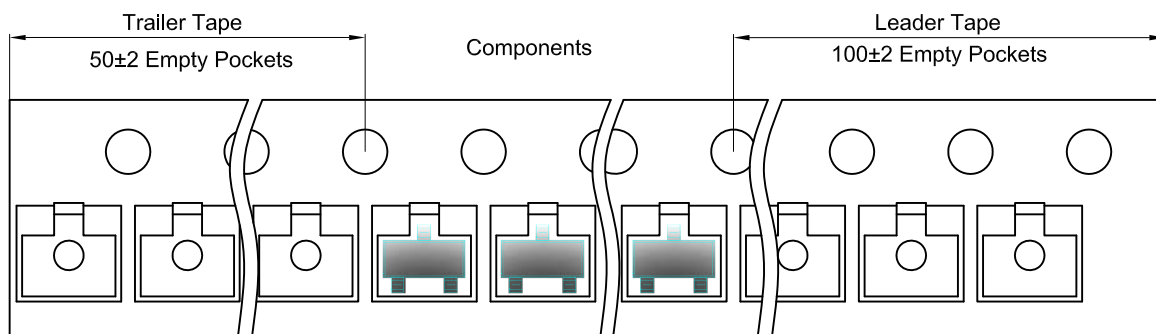


Packaging Description:

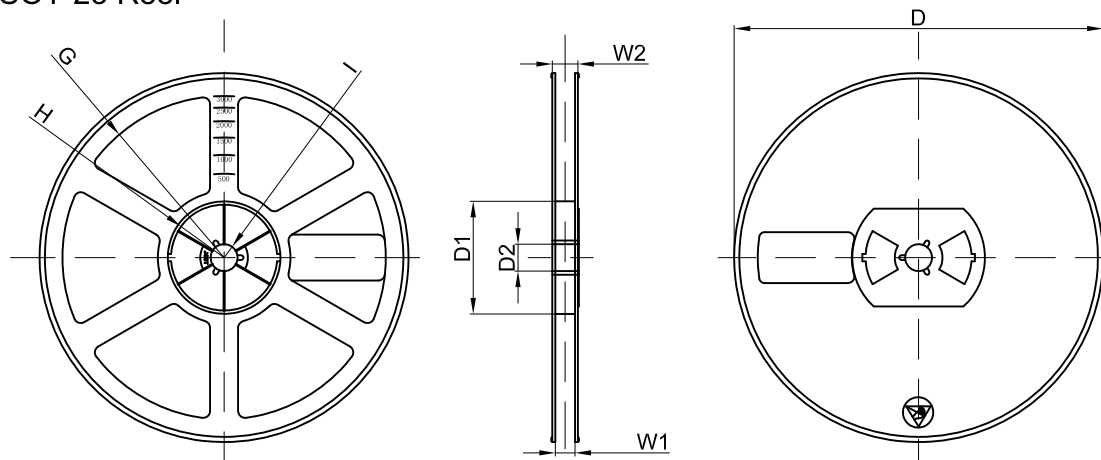
SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in 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-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer



SOT-23 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

Ordering Information:

Device PN	Packing
1SS187 -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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