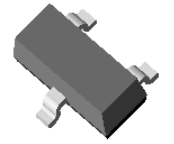


PRIMARY CHARACTERISTICS

P_C	300mW
V_{CEO}	25V
I_C	500mA
h_{FE}	200~350
$T_{J,Max}$	150°C

FEATURES

- Collector Current: $I_C=0.5A$
- Moisture Sensitivity Level 1

SOT-23 PACKAGE
Marking Code : J3Y
Ex : 8050SLT1

 COLLECTOR
3

 1
BASE

 2
EMITTER

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

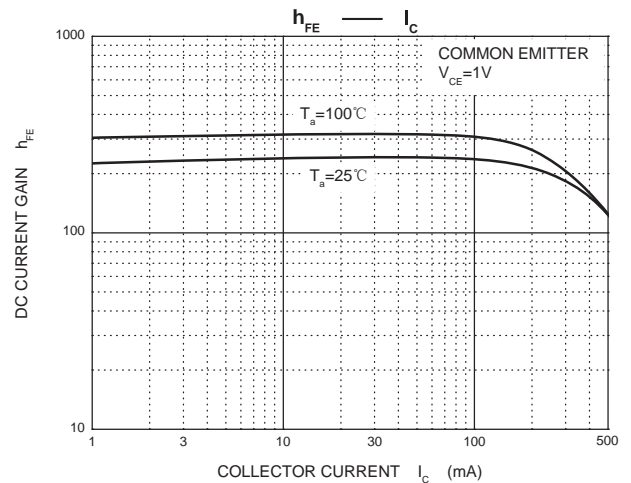
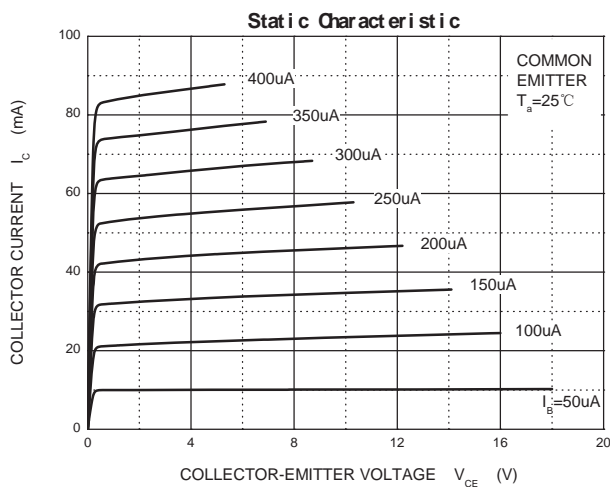
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

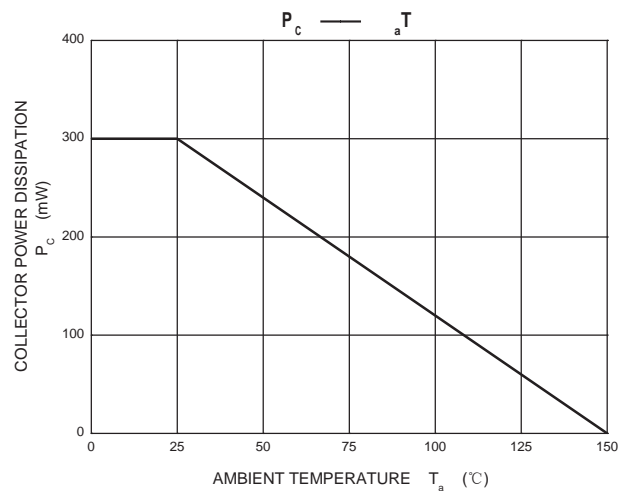
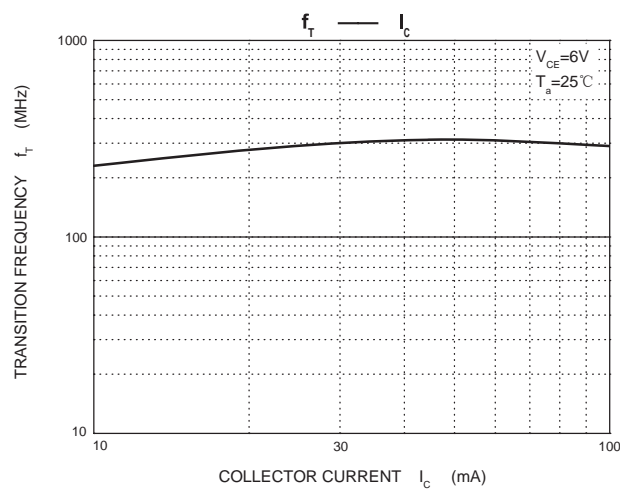
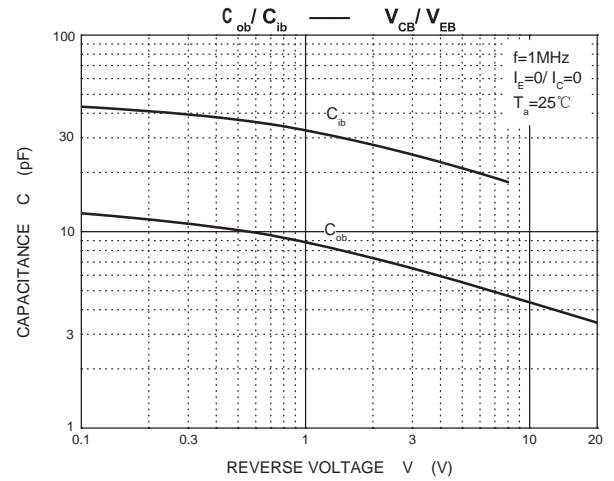
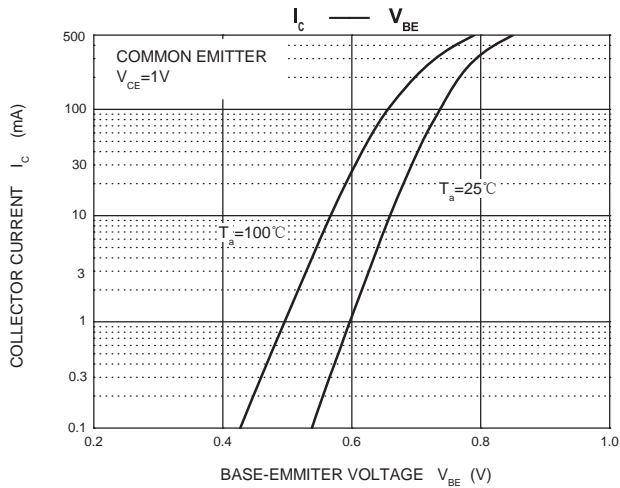
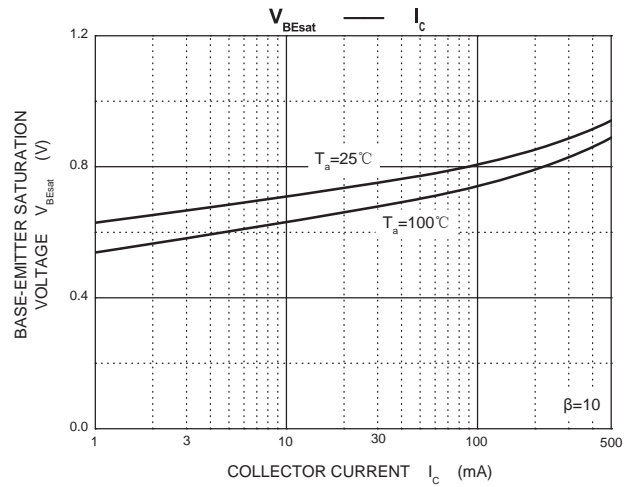
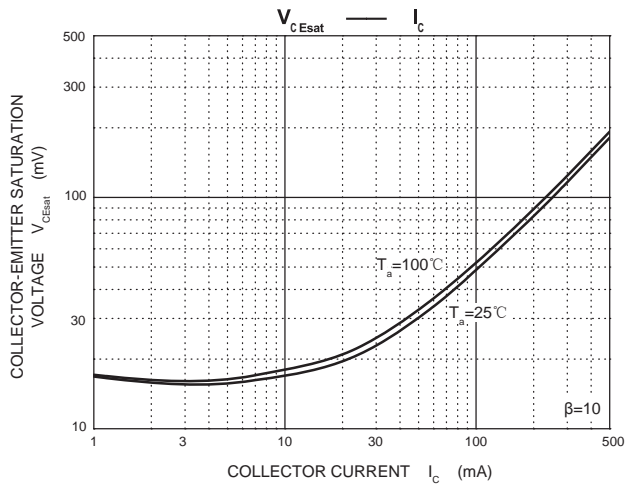
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	500	mA
P_C	Collector Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	417	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 100μA, I _E =0	40			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	25			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =40 V, I _E =0			0.1	μA
Collector cut-off current	I _{CEO}	V _{CB} =20V, I _E =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 5V, I _C =0			0.1	μA
DC current gain	h _{FE(1)}	V _{CE} =1V, I _C = 50mA				h _{FE}
	h _{FE(2)}	V _{CE} =1V, I _C = 500mA	50			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =500 mA, I _B = 50mA			0.6	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =500 mA, I _B = 50mA			1.2	V
Transition frequency	f _T	V _{CE} =6V, I _C = 20mA f=30MHz	150			MHz

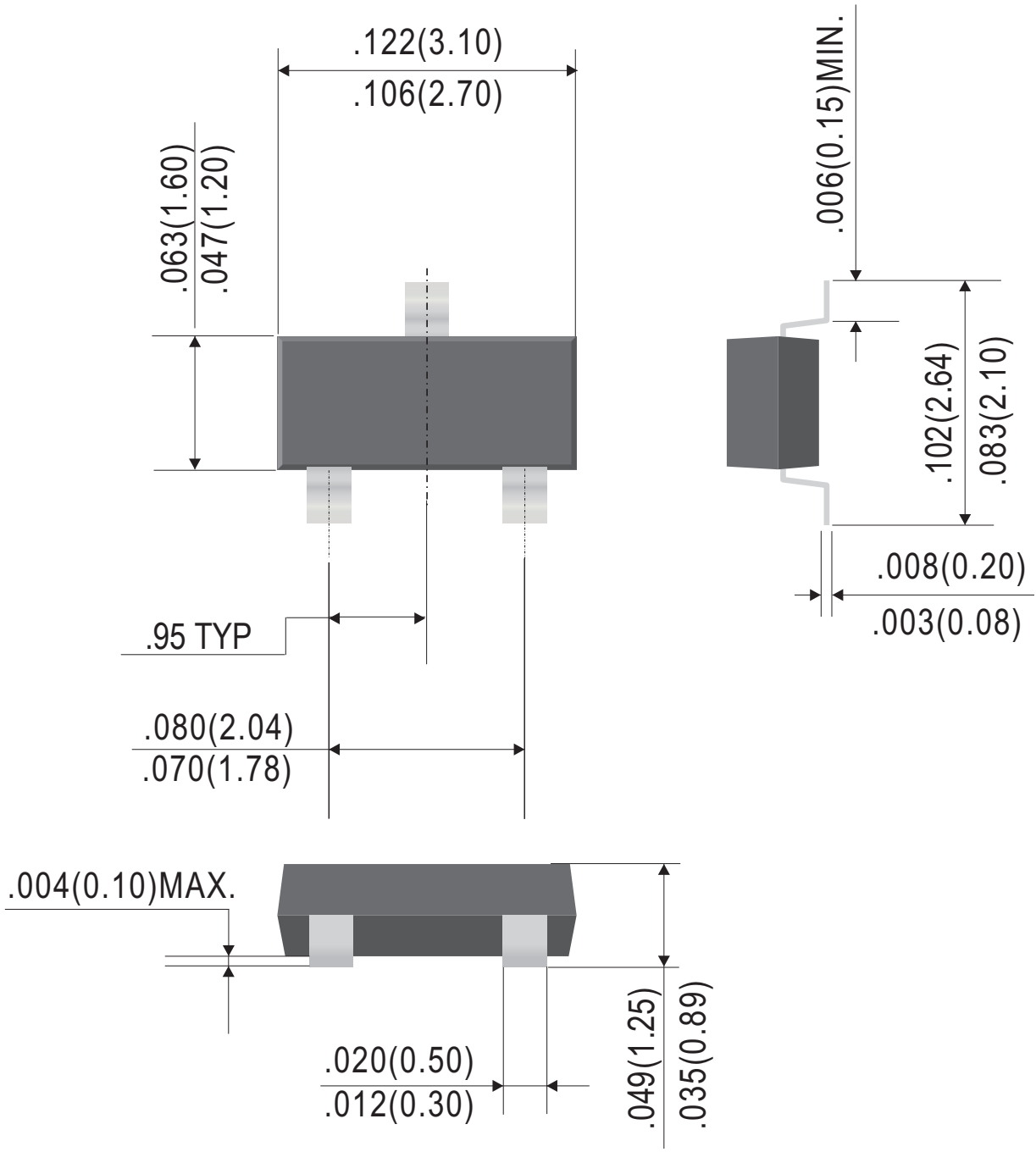
Typical Characteristics





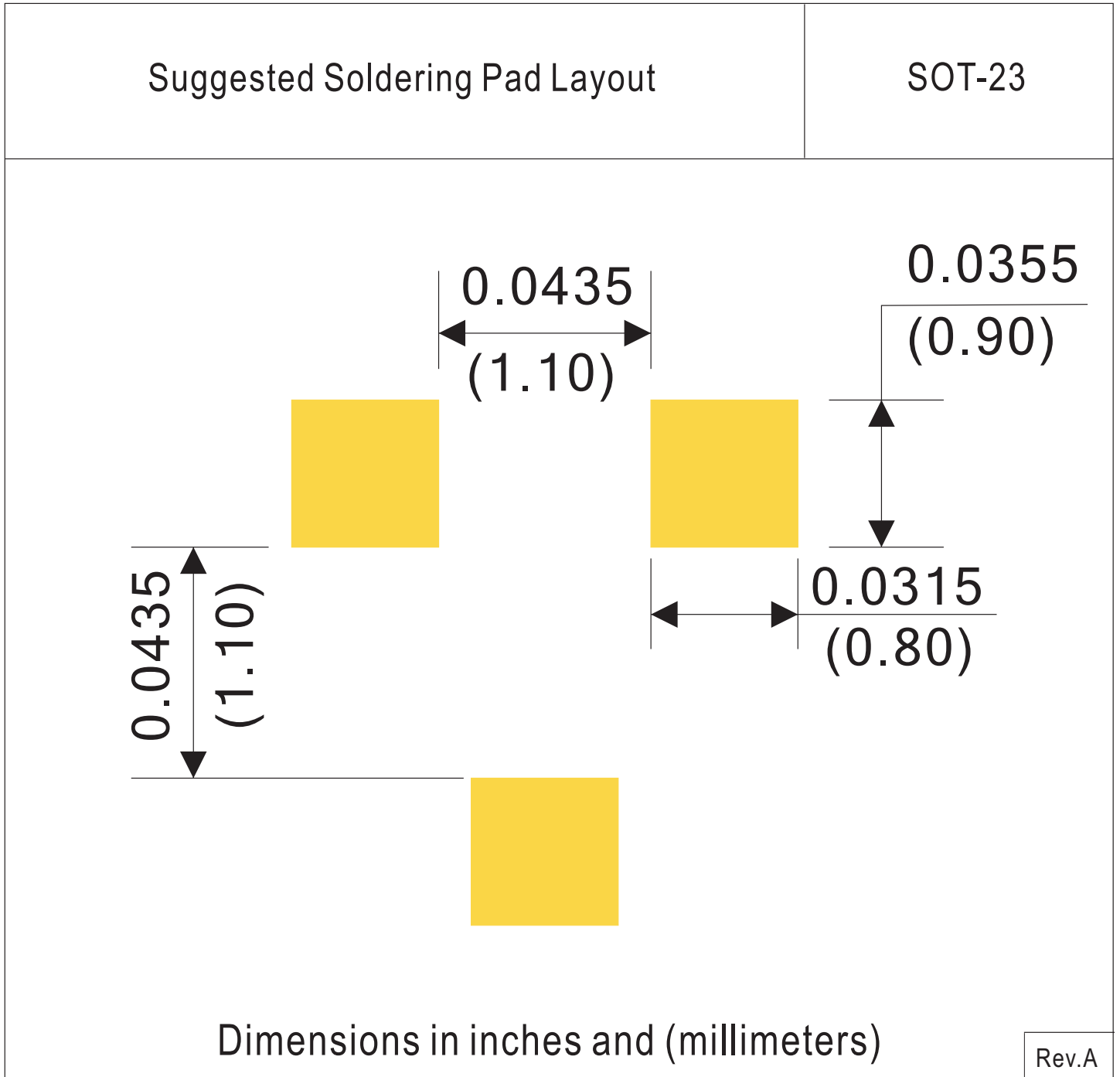
Outline Drawing

SOT-23



Dimensions in inches and (millimeters)

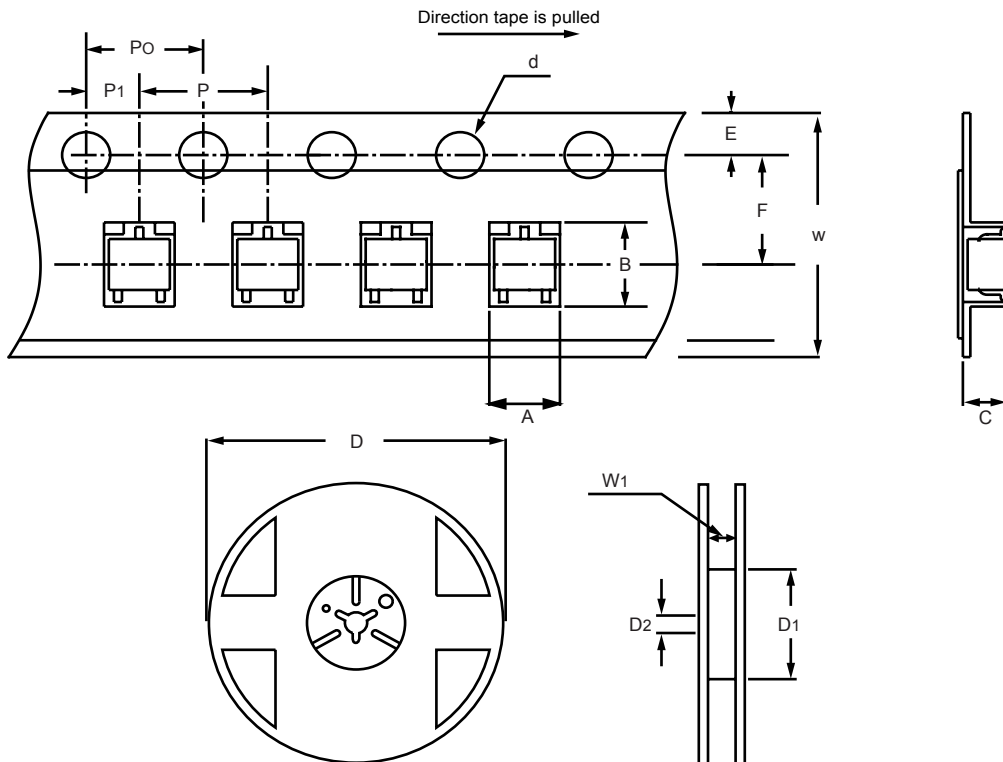
Rev.E



Reel Taping Sepecification - Surface Mount Device/SOT-23

Reel Packing

PACKAGE	PER REEL EA	REEL DIA (m/m)	BOX SIZE (m/m)	PER BOX EA	CARTION (m/m)	PER CARTION EA	GROSS WEIGHT (Kg)
SOT-23	3,000	178	192*195*136	30,000	440*410*410	360,000	15.0



ITEM	SYMBOL	SPECIFICATIONS (mm)	SPECIFICATIONS (inch)
Carrier width	A	3.1±0.1	0.122±0.004
Carrier length	B	2.85±0.1	0.112±0.004
Carrier depth	C	1.40±0.1	0.055±0.004
Sprocket hole	d	1.5 + 0.1/-0	0.059 + 0.004/-0
Reel outside diameter	D	180 + 0/-3	7.083 + 0/-0.118
Reel inner diameter	D1	60 + 1/-0	2.361 + 0.039/-0
Feed hole diameter	D2	13±0.2	0.512±0.008
Sprocket hole position	E	1.75±0.1	0.069±0.004
Punch hole position	F	3.5±0.05	0.138±0.002
Punch hole pitch	P	4.0±0.1	0.157±0.004
Sprocket hole pitch	P0	4.0±0.1	0.157±0.004
Embossment center	P1	2.0±0.05	0.079±0.002
Tape width	W	8.0±0.2	0.315±0.008
Reel width	W1	9.0±0.3	0.354±0.012

NOTE: 1.Devices are packed in accordance with EIAJ stand ETX-7001 and specifications listed above.
 2.Available on 7 inch (3,000 c.t.) or 13 inch (10,000 c.t.) diameter reels.

Ordering Information:

Device PN	Packing
8050SLT1G ⁽¹⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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