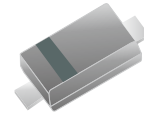


CDSP400-HF

RoHS Device
Halogen Free



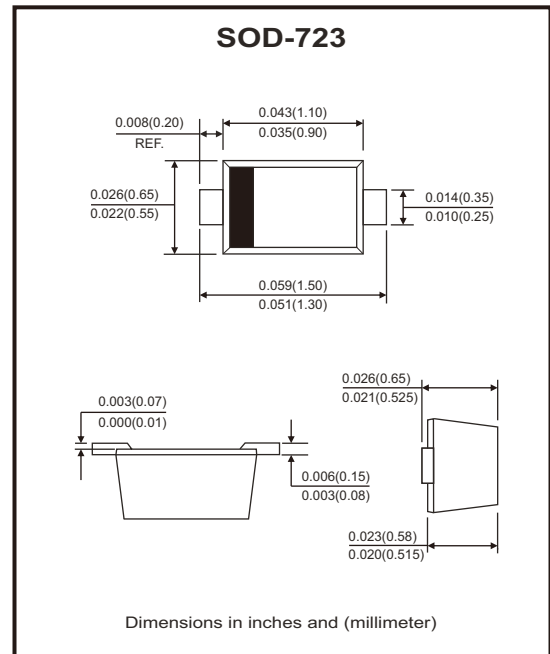
Features

- Small surface mounting type.
- High speed.
- High reliability with high surge current handling capability.

Mechanical data

- Case: Molded plastic SOD-723.
- Polarity: Indicated by cathode band.
- Mounting position: Any

Circuit Diagram



Maximum Ratings (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-repetitive peak reverse voltage	V_{RM}	90	V
DC blocking voltage	V_R	80	V
Forward continuous current	I_{FM}	225	mA
Average rectified output current	I_o	100	mA
Non-repetitive peak forward surge current @ $t=8.3\text{ms}$	I_{FSM}	2	A
Power dissipation	P_D	100	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	1250	$^\circ\text{C/W}$
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=100\text{mA}$			1.2	V
Reverse current	I_R	$V_R=80\text{V}$			0.1	μA
Capacitance between terminals	C_T	$V_R=0.5\text{V}$, $f=1\text{MHz}$			3.0	pF
Reverse recovery time	t_{rr}	$V_R=6\text{V}$, $I_F=10\text{mA}$, $R_L=100\Omega$			4	nS

Rating and Characteristic Curves (CDSP400-HF)

Fig.1 - Forward Characteristics

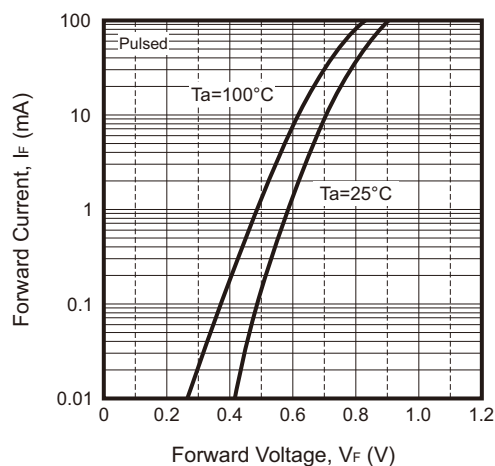


Fig.2 - Reverse Characteristics

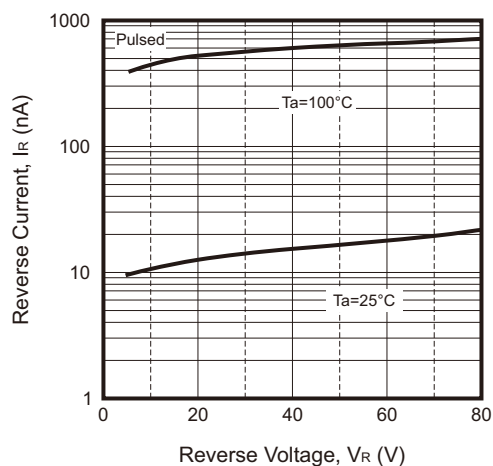


Fig.3 - Capacitance Characteristics

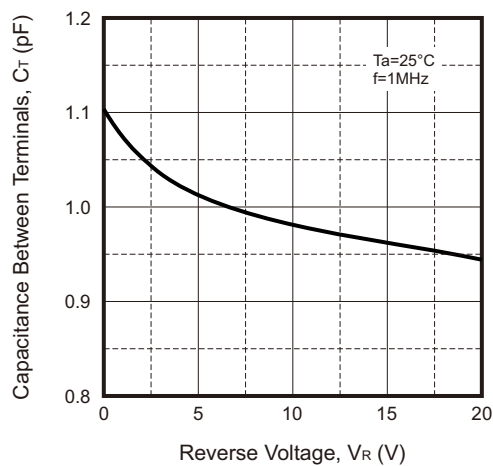
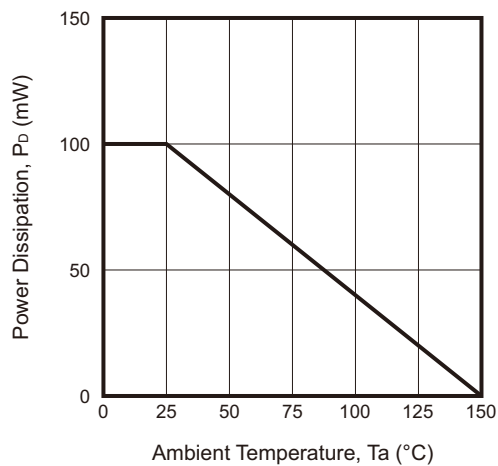
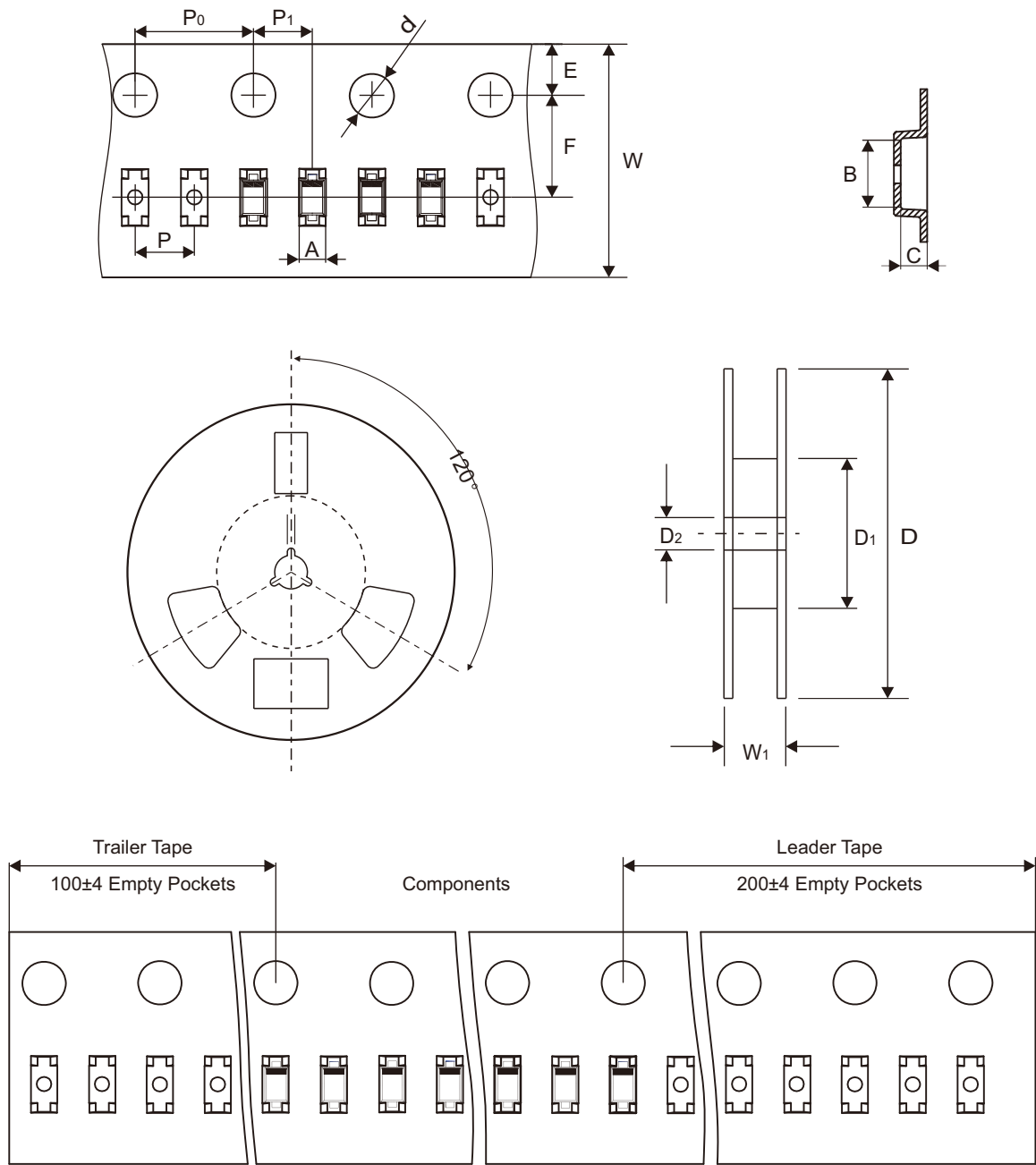


Fig.4 - Power Derating Curve



Reel Taping Specification



SOD-723	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.73 Typ	1.71 Typ	0.62 Typ	1.50 Typ	178.00 Typ	54.40 Typ	13.00 Typ
	(inch)	0.029 Typ	0.067 Typ	0.024 Typ	0.059 Typ	7.008 Typ	2.142 Typ	0.512 Typ

SOD-723	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 Typ	3.50 Typ	2.00 Typ	4.00 Typ	2.00 Typ	8.00 Typ	12.30 Typ
	(inch)	0.069 Typ	0.138 Typ	0.079 Typ	0.157 Typ	0.079 Typ	0.315 Typ	0.484 Typ

Marking Code

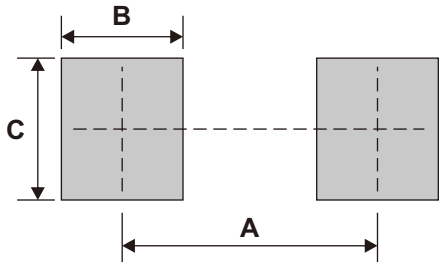
Part Number	Marking Code
CDSP400-HF	7



■ = Cathode band

Suggested PAD Layout

SIZE	SOD-723	
	(mm)	(inch)
A	1.26	0.050
B	0.60	0.024
C	0.70	0.028



Note: 1. The pad layout is for reference purposes only.

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-723	8,000	7