

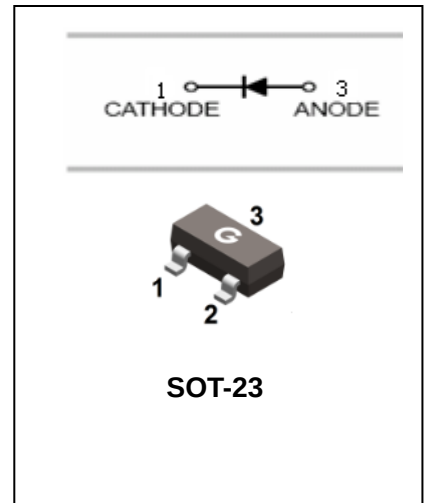
40V SILICON HIGH CURRENT LOW LEAKAGE SCHOTTKY DIODE

ZLLS1000

FEATURES

- Low Equivalent On Resistance
- Extremely Low Leakage (20uA @30V)
- High current capability ($I_F = 1.16A$)
- Low V_F , Fast switching Schottky
- ZLLS1000 complements low temperature equivalent ZHCS1000
- Package thermally rated to 150°C

HF



APPLICATIONS

- DC - DC Converters
- Strobes
- Mobile Phones
- Charging Circuits
- Motor control

ORDERING INFORMATION

Type No.	Marking	Package Code
ZLLS1000	L10	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Continuous reverse voltage	V_R	40	V
Forward Current	I_F	1.16	A
Peak Repetitive Forward Current Rectangular Pulse Duty Cycle	I_{FPK}	1.88	A
Non Repetitive Forward Current $t \leq 100\mu s$	I_{FSM}	22	A
$t \leq 10ms$		6.4	A
Power Dissipation	P_d	625	mW
Junction to ambient (a)	$R_{\theta JA}$	200	°C/W
Junction to ambient (b)	$R_{\theta JA}$	149	°C/W
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-55 to +150	°C

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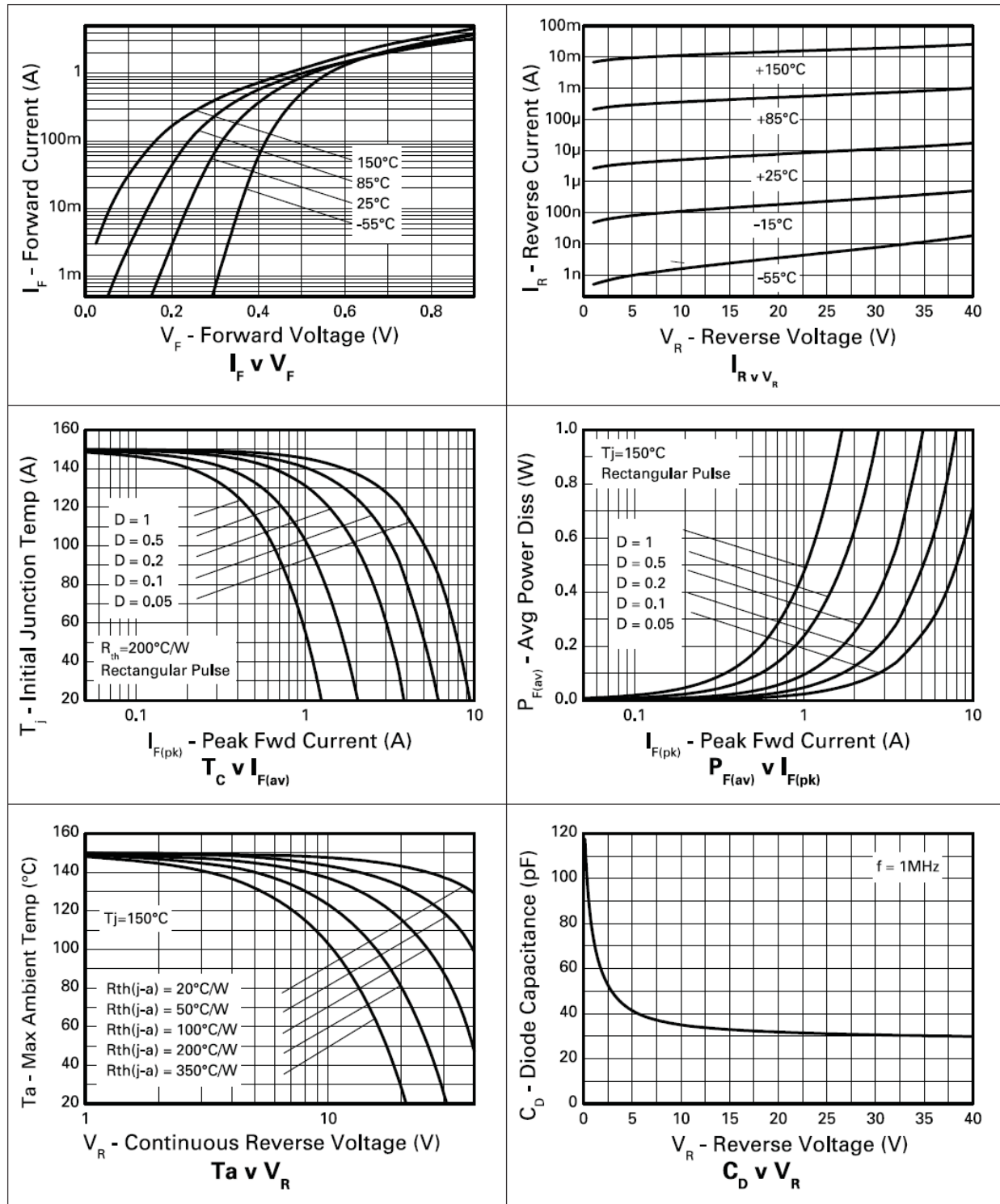
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	Typ.	MAX	UNIT
Reverse Breakdown voltage	$V_{(BR)R}$	$I_R=500\mu A$	40			
Reverse voltage leakage current	I_R	$V_R=30V$			20	μA
Forward voltage	V_F	$I_F=50mA$ $I_F=100mA$ $I_F=250mA$ $I_F=400mA$ $I_F=750mA$ $I_F=1000mA$ $I_F=1500mA$			310 340 390 460 510 560 660	mV
Total capacitance	C_D	$V_R=30V, f=1MHz$		31		pF
Reverse recovery time	t_{rr}	$I_F=500mA, V_R=5V, R_L=6\Omega$		2.58		ns

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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



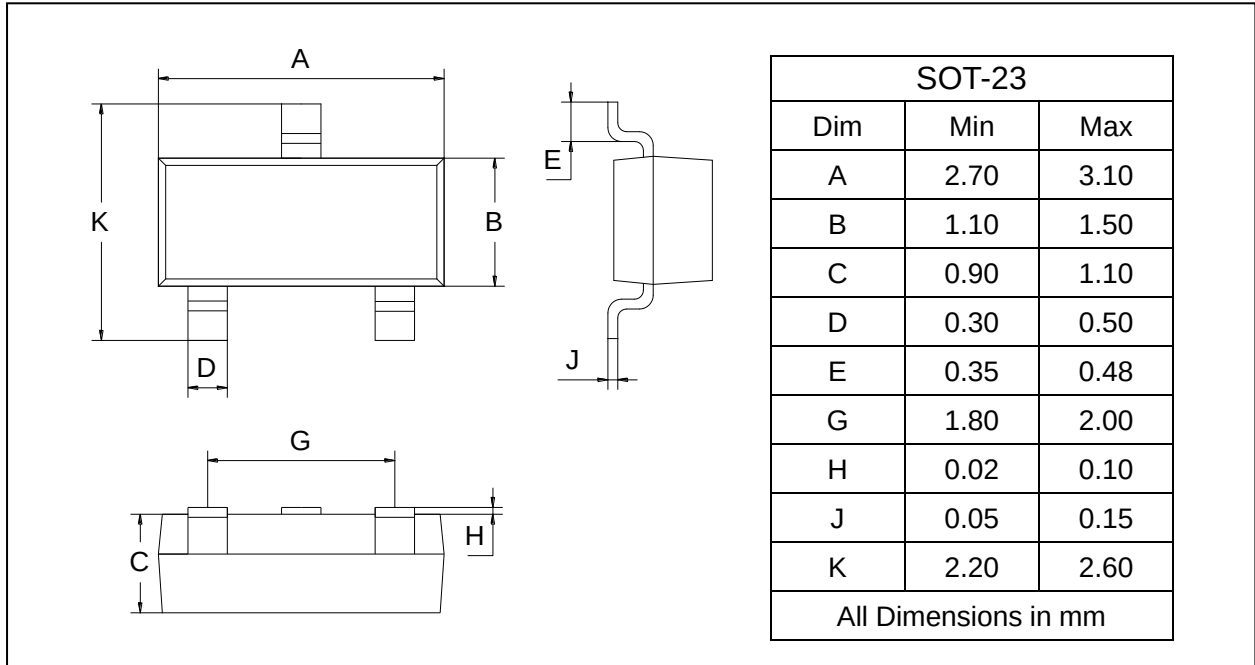
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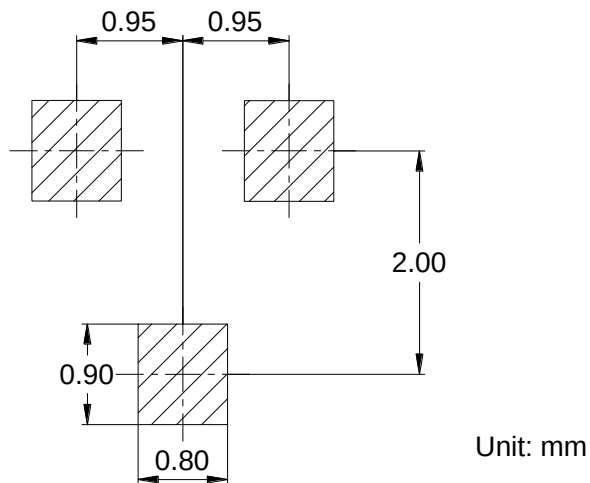
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
ZLLS1000	SOT-23	3000 pcs / Tape & Reel