

## Features

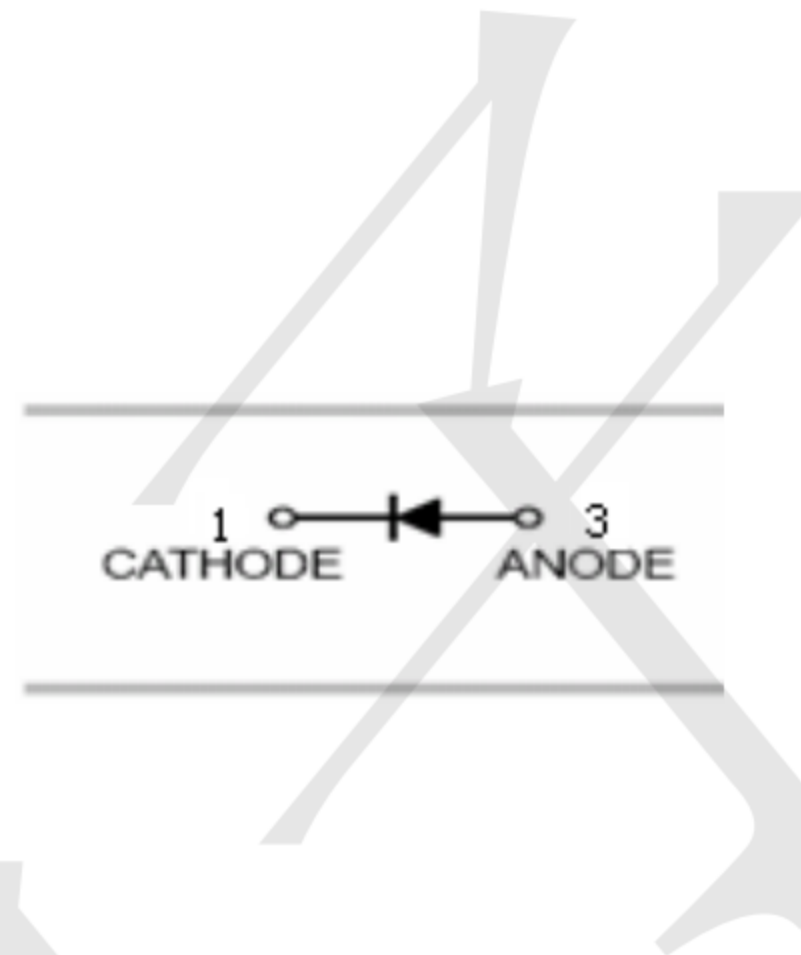
- General rectification
- Low  $V_F$ ; Low  $I_R$
- High reliability

## Applications

- surface mount schottky barrier rectifier



Marking: ZS1



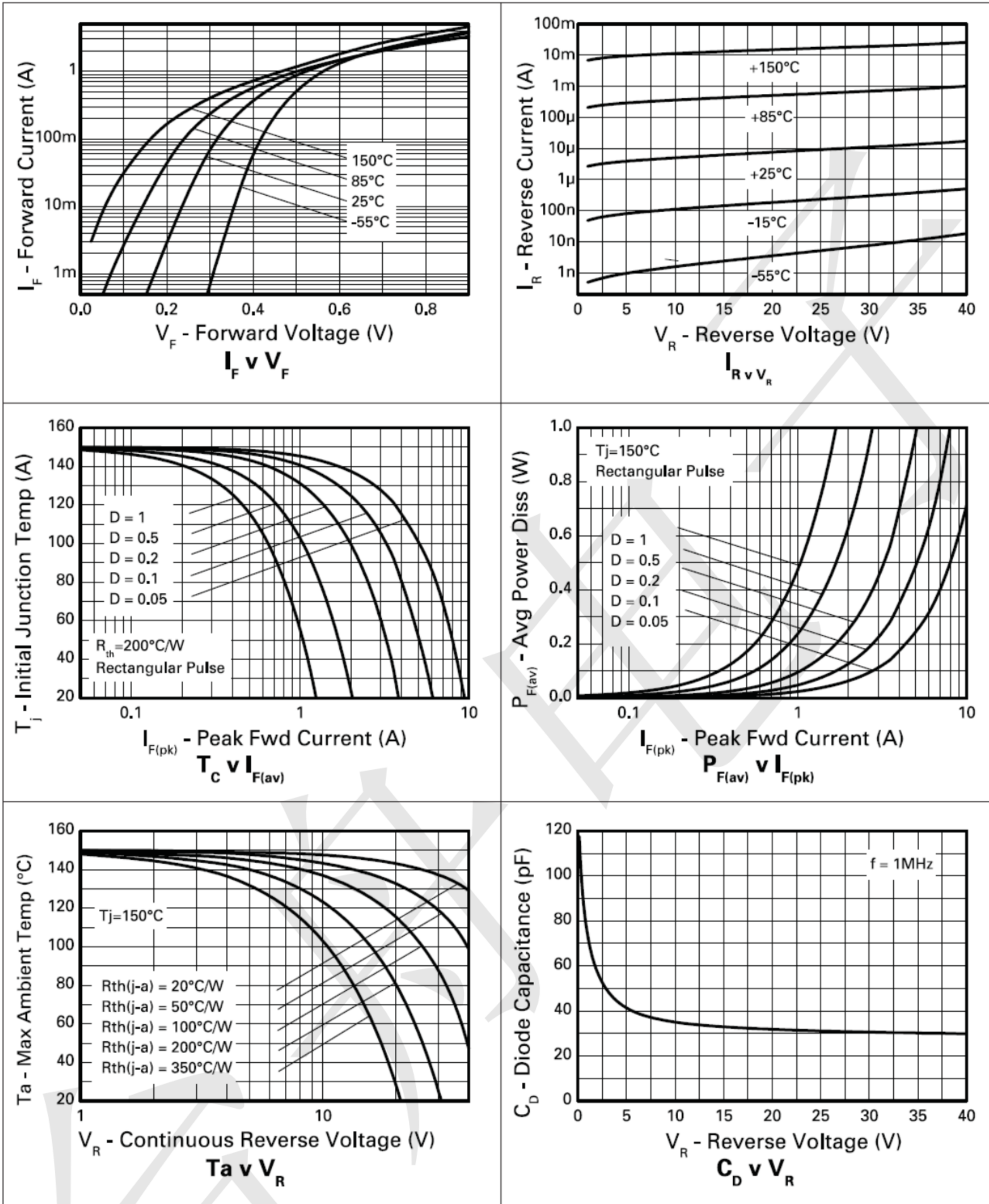
## Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ unless otherwise noted)

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	$I_{FSM}$	$t \leq 100\mu\text{s}$	22	A
		$t \leq 10\text{ms}$	6.4	A
Power Dissipation	$P_d$	625	mW	
Junction to ambient (a)	$R_{\theta JA}$	200	$^\circ\text{C/W}$	
Junction to ambient (b)	$R_{\theta JA}$	149	$^\circ\text{C/W}$	
Junction temperature	$T_j$	150	$^\circ\text{C}$	
Storage temperature range	$T_{stg}$	-55 to +150	$^\circ\text{C}$	

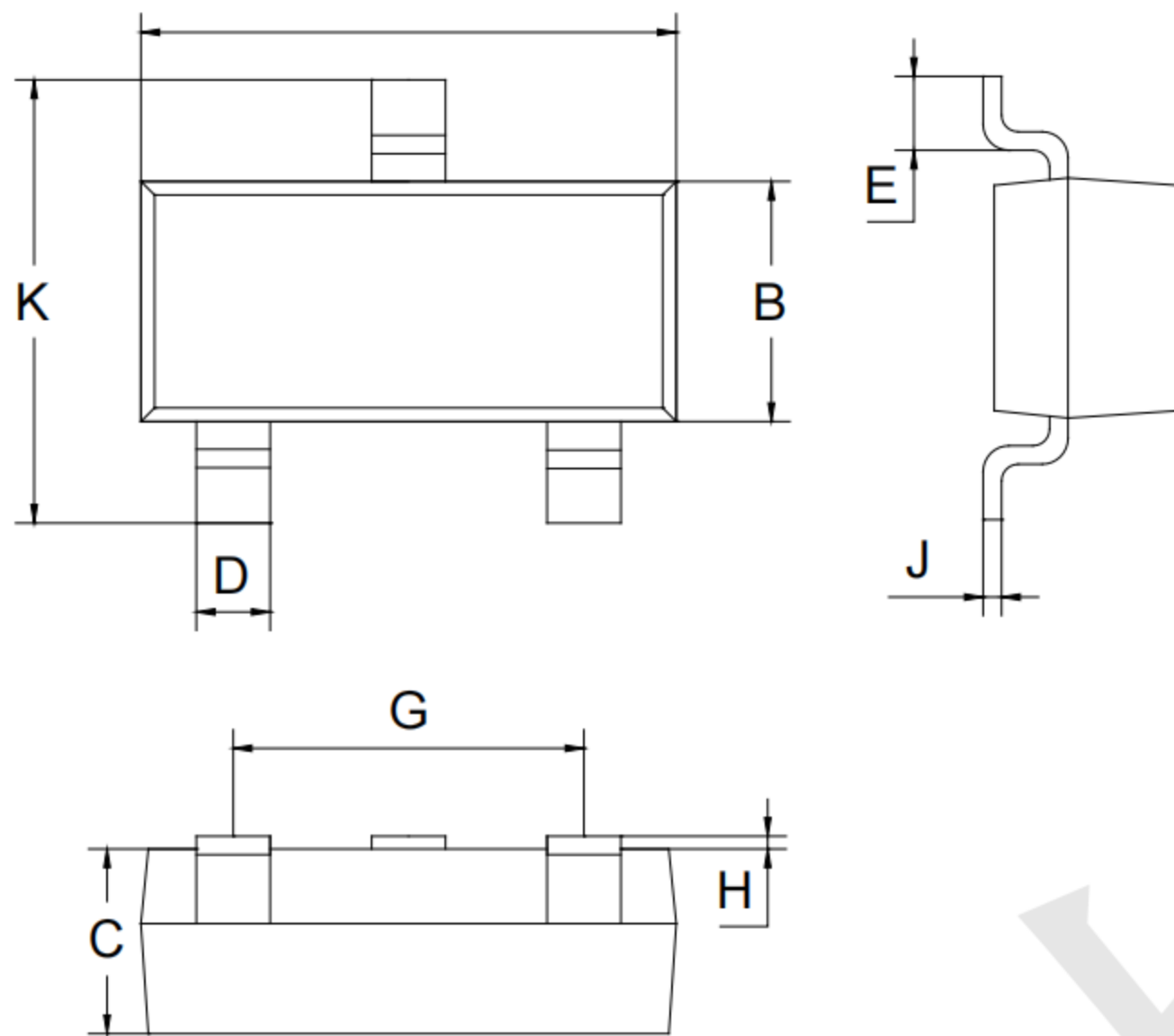
**Electrical Characteristics** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

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

**Typical Electrical Characteristic Curves**

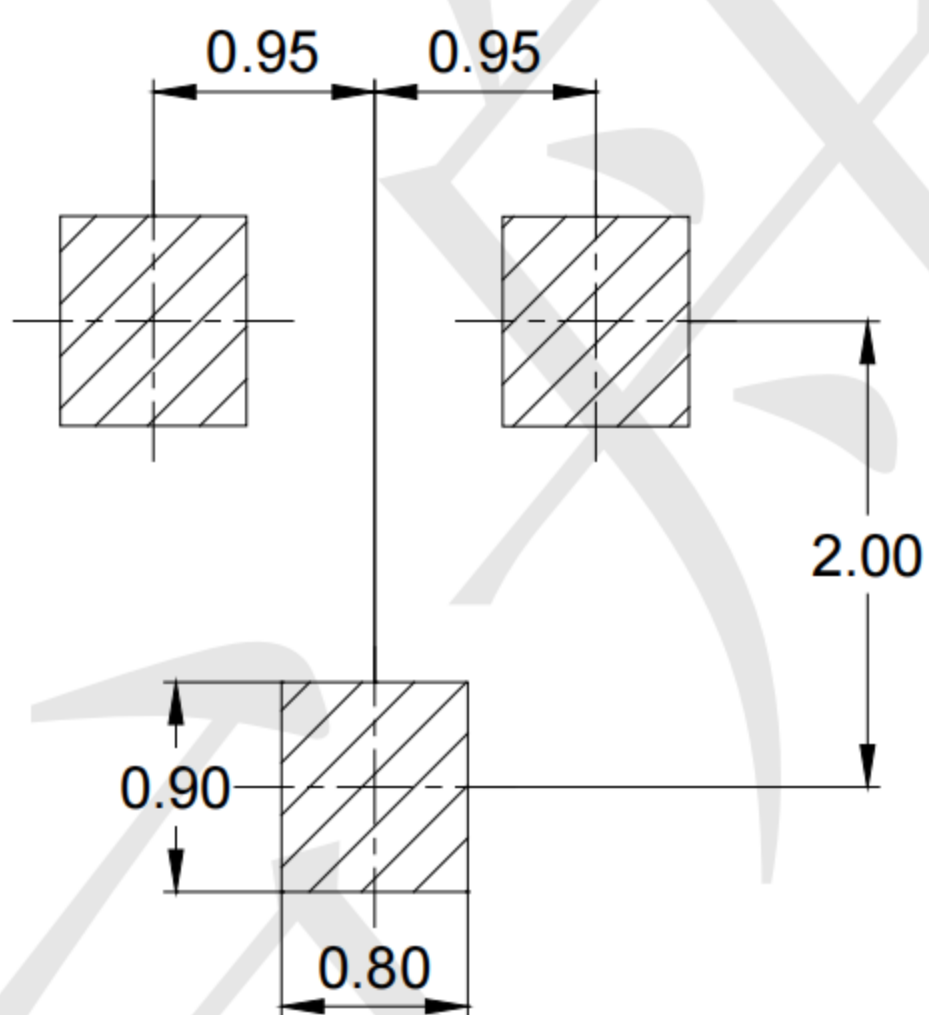


**Outline Drawing - SOT23 (unit:mm)**



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	0.90	1.10
D	0.30	0.50
E	0.35	0.48
G	1.80	2.00
H	0.02	0.10
J	0.05	0.15
K	2.20	2.60

**Mounting Pad Layout-SOT23 (unit:mm)**



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