

Features

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

Applications

- surface mount schottky barrier rectifier



Marking: ZS1



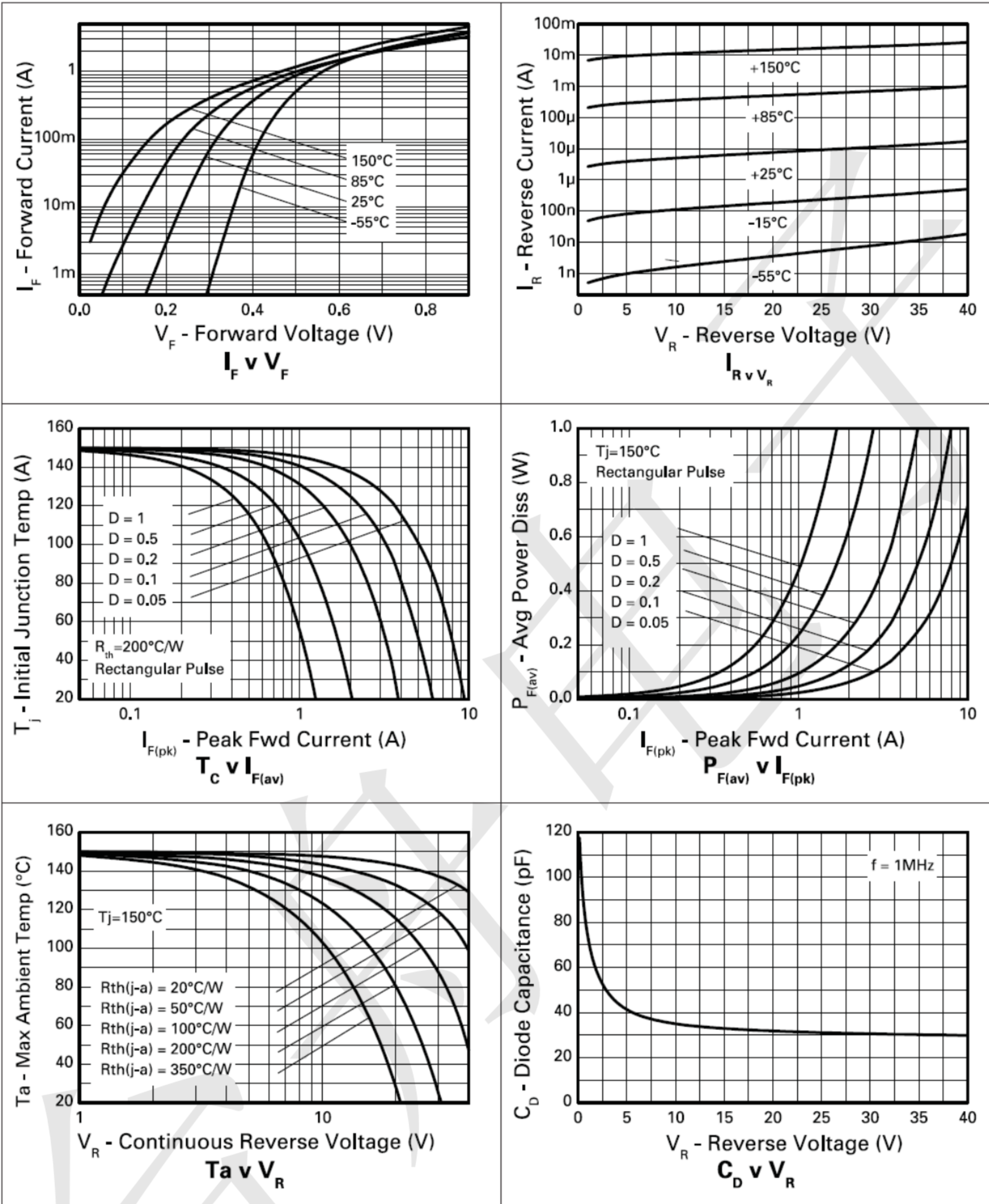
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

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	$^\circ\text{C}$

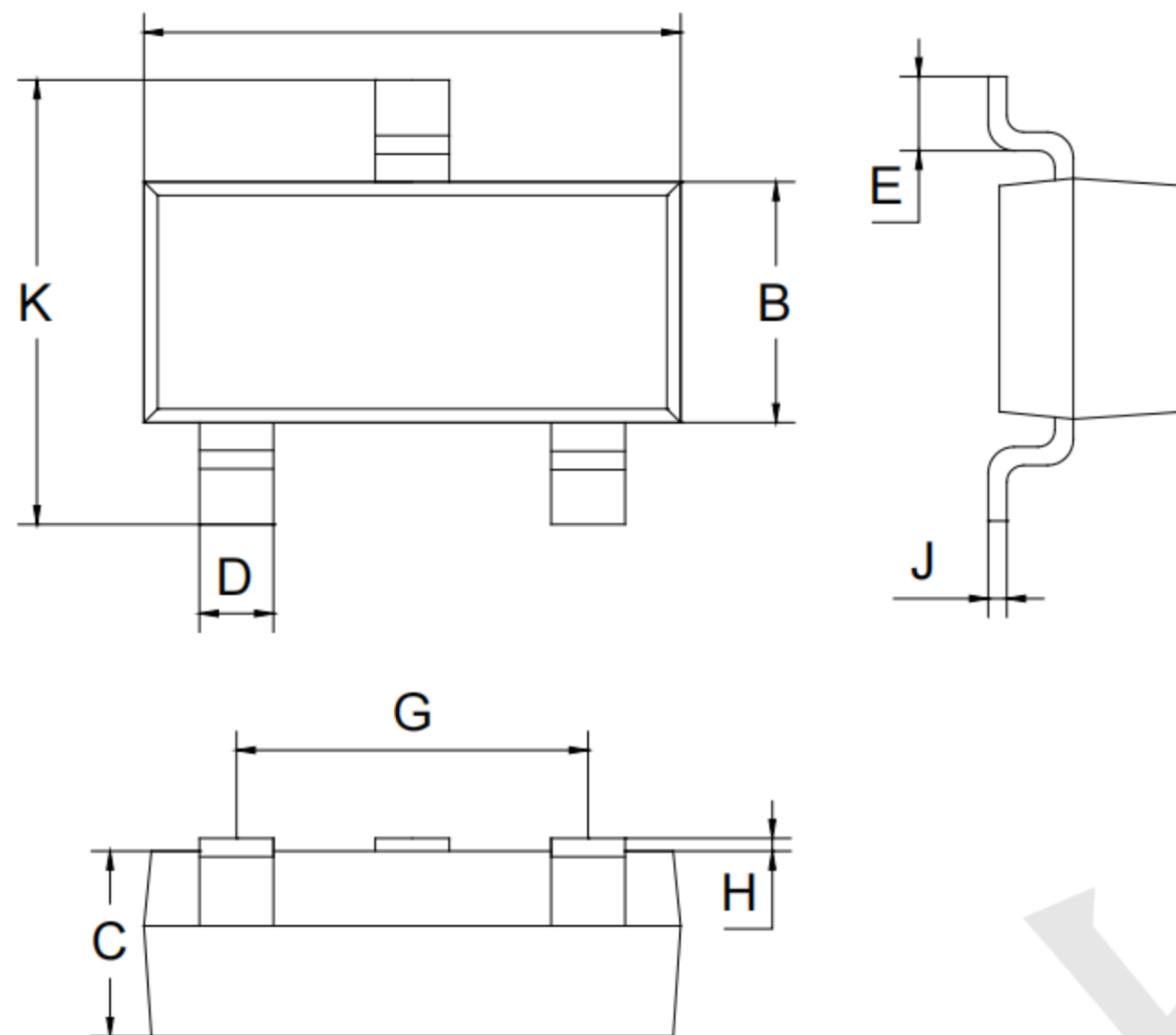
Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

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	μA
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)

