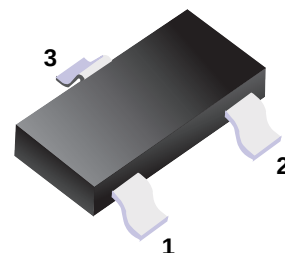
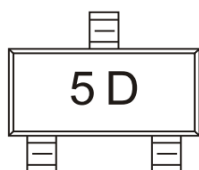


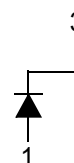
Switching Diode

■ Features

- High-Speed Switching Diode
- MARKING: 5D



■ Simplified outline(SOT-23)



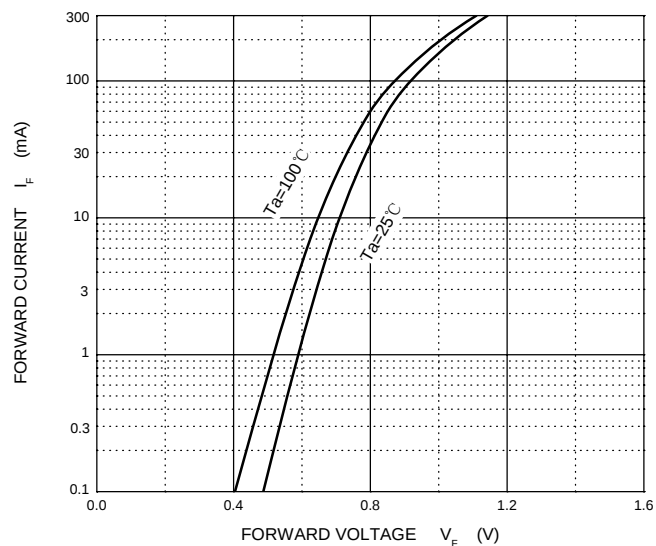
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	V
Average Rectified Output Current	I_O	300	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	2	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^\circ\text{C}$

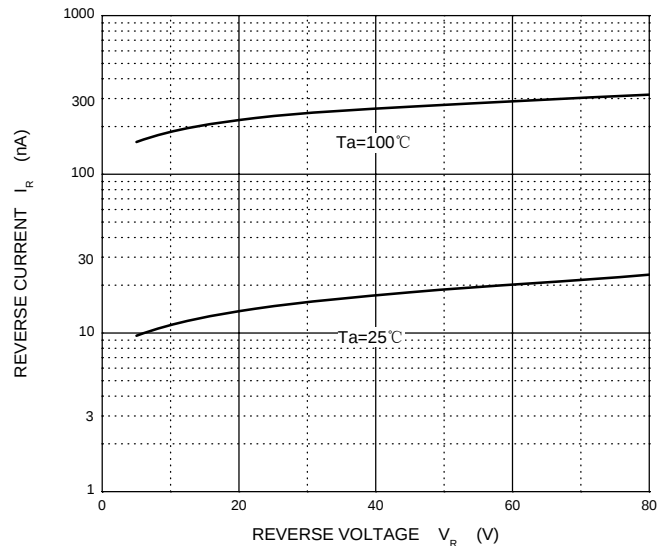
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	100			V	$I_R=100\mu\text{A}$
Forward Voltage	V_{F1}			715	mV	$I_F=1\text{mA}$
	V_{F2}			855	mV	$I_F=10\text{mA}$
	V_{F3}			1000	mV	$I_F=50\text{mA}$
	V_{F4}			1250	mV	$I_F=150\text{mA}$
Reverse Current	I_{R1}			1	μA	$V_R=75\text{V}$
	I_{R2}			25	nA	$V_R=20\text{V}$
Diode Capacitance	C_D			2	pF	$V_R=0, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}			4	ns	$I_F=I_R=10\text{mA}$, $t_{rr}=0.1 \cdot I_R$

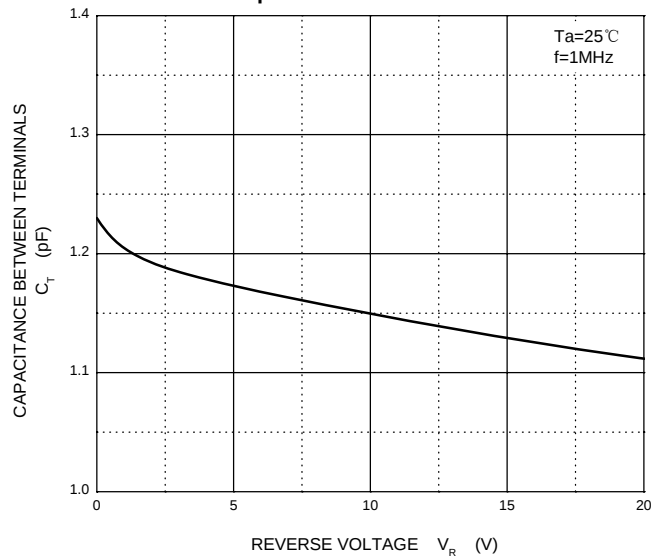
Forward Characteristics



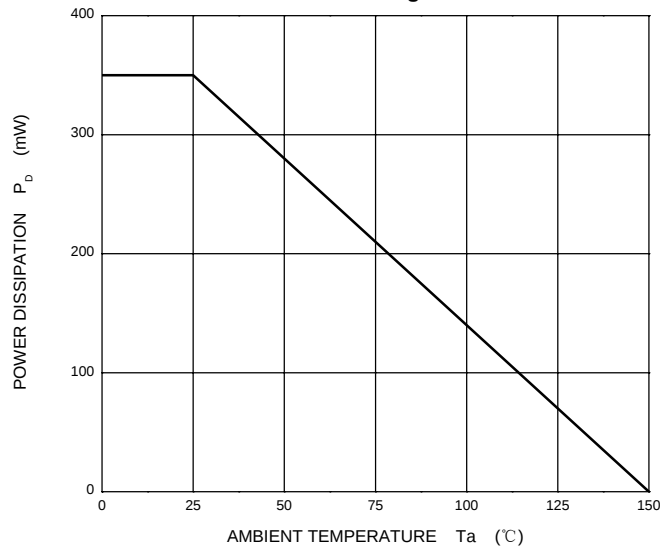
Reverse Characteristics



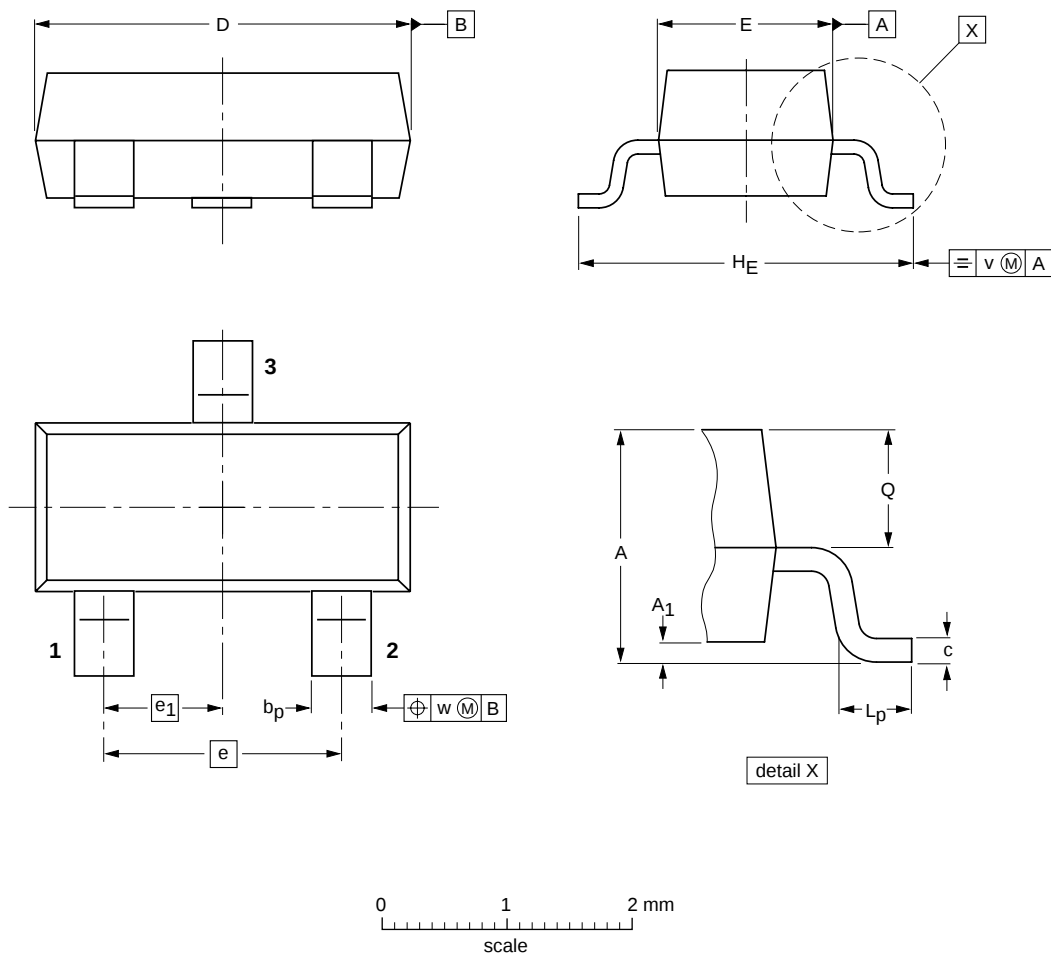
Capacitance Characteristics



Power Derating Curve



■ SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1