

Features

- High Switching Speed: $t_{rr} \leq 4 \text{ ns}$
- Low Leakage Current
- Small SMD Plastic Packages
- Lead Free By Design



SOT-23

Applications

- High-Speed Switching
- General-Purpose Switching

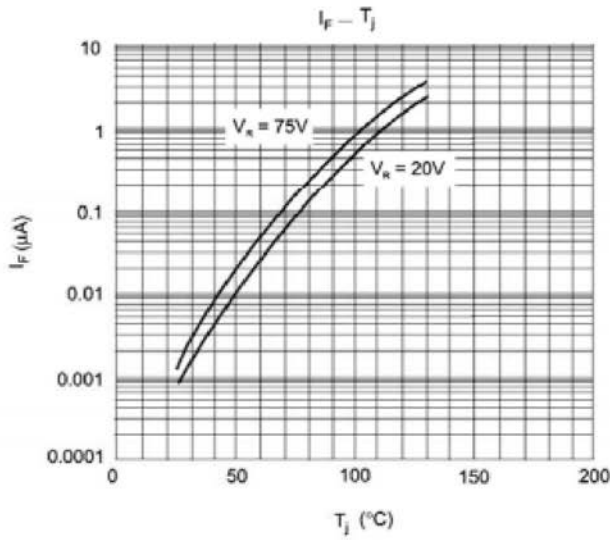
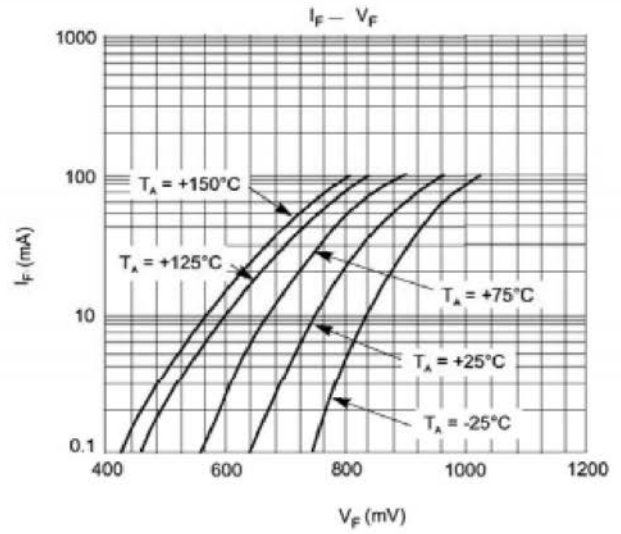
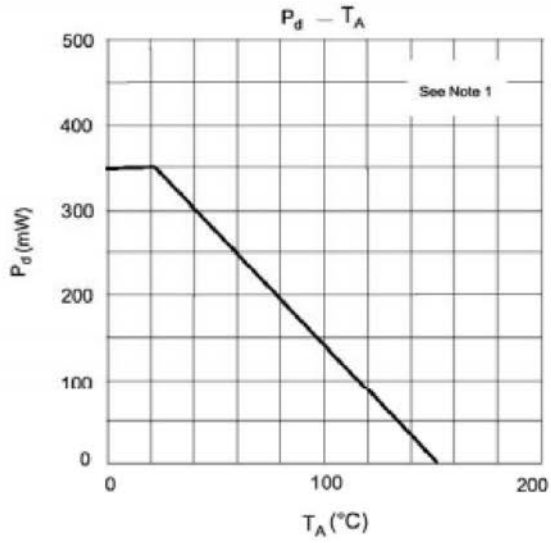
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	70	V
Average Forward Current	$I_{F(AV)}$	0.2	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	at $t=1.0\text{s}$ 1	A
		at $t=1.0\text{ms}$ 2	
Power Dissipation	P_d	350	mW
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_J, T_{STG}	-65 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	75		V
Reverse Voltage Leakage Current	I_R	$V_R=70\text{V}$		5	μA
		$V_R=25\text{V}, T_A=150^\circ\text{C}$		60	
		$V_R=70\text{V}, T_A=150^\circ\text{C}$		100	
Forward Voltage	V_{FM}	$I_F=1.0\text{mA}$		715	mV
		$I_F=10\text{mA}$		855	
		$I_F=50\text{mA}$		1	V
		$I_F=150\text{mA}$		1.25	
Diode Capacitance	C_T	$V_R=0\text{V}, f=1\text{MHz}$		1.5	pF
Reverse Recovery Time	T_{RR}	$I_F=I_R=10\text{mA}, I_{RR}=1.0\text{mA}, R_L=100\Omega$		6	nS

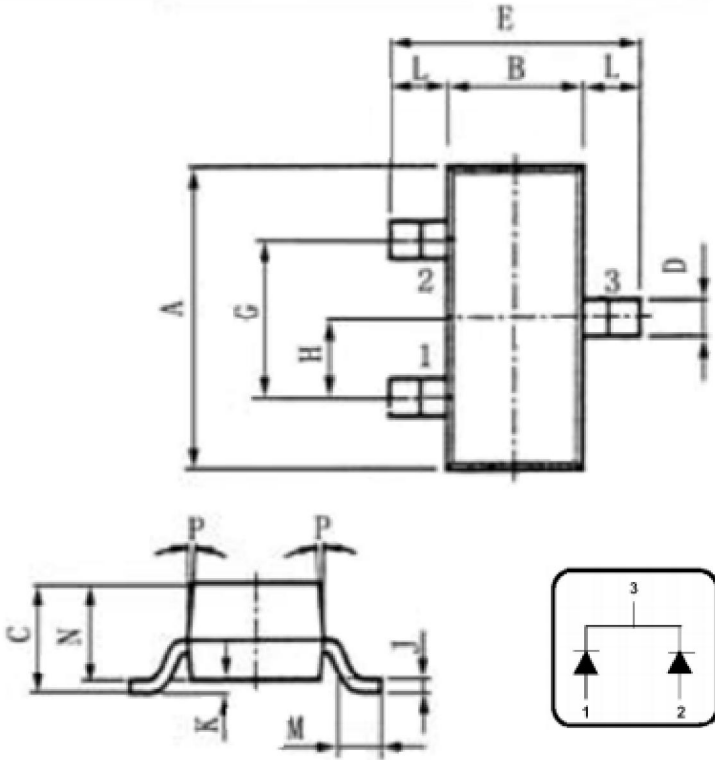
Typical Electrical Characteristic Curves



Package Outline Dimensions

SOT-23

(In mm)



	SOT- 23
A	2.9±0.02
B	1.30+0.20/-0.15
C	1.30MAX
D	0.40+0.15/-0.05
E	2.40+0.30/-0.20
G	1.9±0.2
H	0.95±0.1
J	0.10+0.10/-0.05
K	0.00-0.10
L	0.55±0.1
M	0.2MIN
N	1.00+0.20/-0.10
P	7"