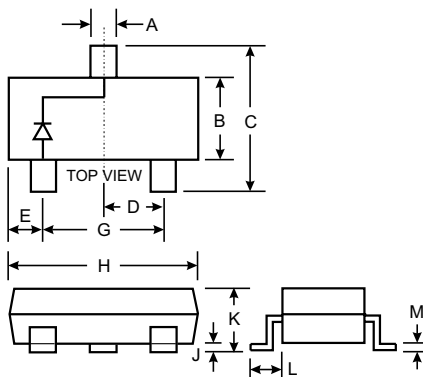


Features

- Very Low Forward Voltage Drop
- High Conductance
- For Use in DC-DC Converter, PCMCIA, and Mobile Telecommunications Applications

Mechanical Data

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.008 grams (approx.)
- Marking: K77 and Date Code



SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.19	1.40
C	2.10	2.50
D	0.89	1.05
E	0.45	0.61
G	1.78	2.05
H	2.65	3.05
J	0.013	0.15
K	0.89	1.10
L	0.45	0.61
M	0.076	0.178
All Dimensions in mm		

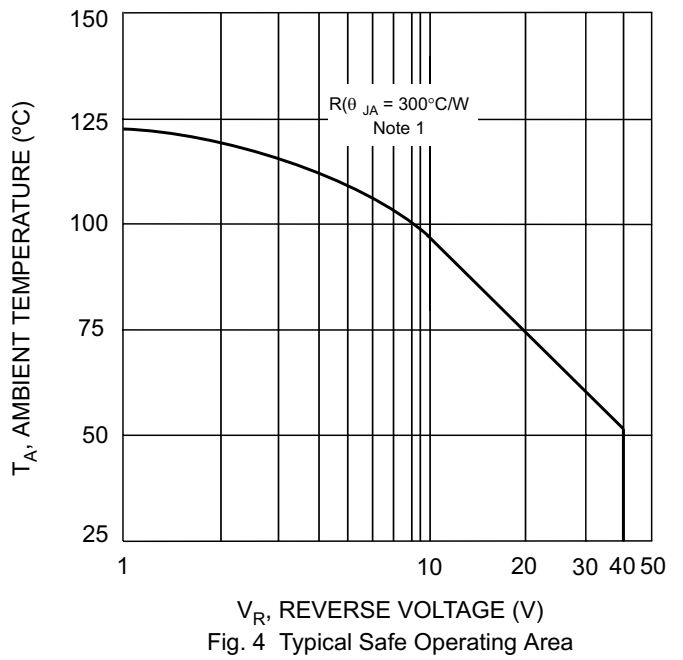
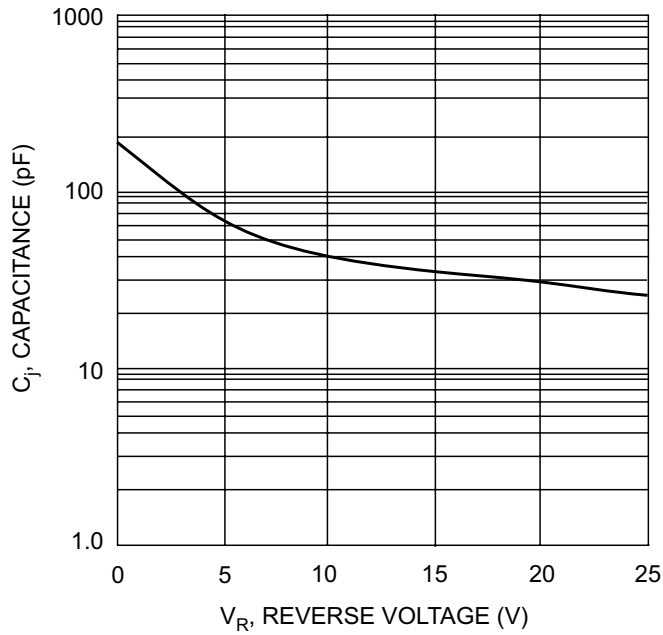
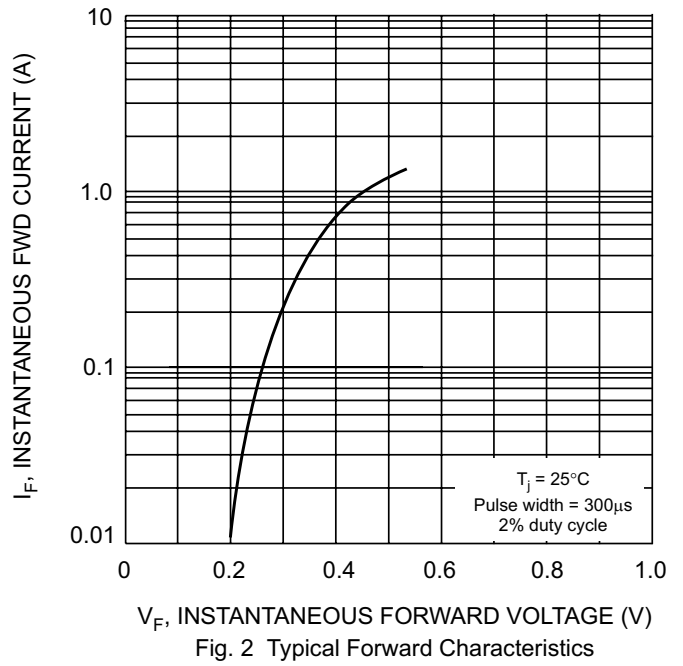
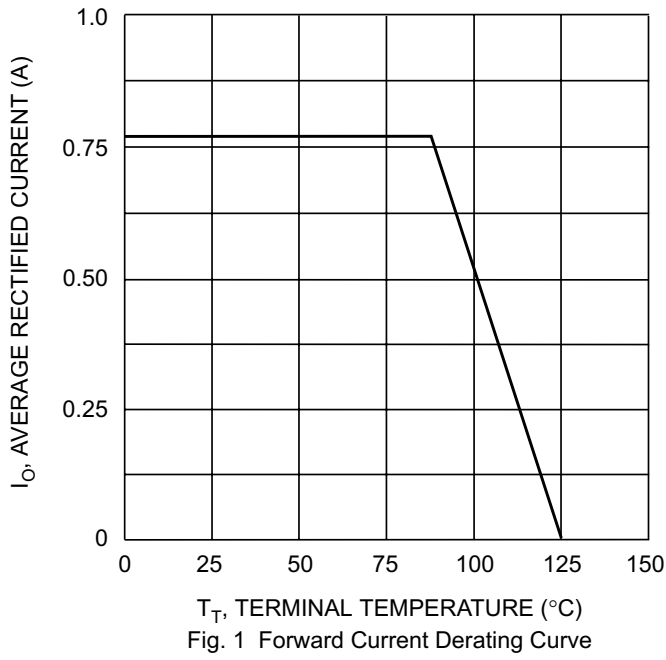
Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Current (Note 1)	I_O	0.75	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	5.5	A
Power Dissipation (Note 1)	P_d	350	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	286	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-40 to +125	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	40	45	—	V	$I_R = 300\mu\text{A}$
Forward Voltage (Note 2)	V_F	—	225 235 290 340 390 420 475	280 310 350 420 490 540 650	mV	$I_F = 50\text{mA}$ $I_F = 100\text{mA}$ $I_F = 250\text{mA}$ $I_F = 500\text{mA}$ $I_F = 750\text{mA}$ $I_F = 1000\text{mA}$ $I_F = 1500\text{mA}$
Maximum Reverse Current (Note 2)	I_R	—	50	100	μA	$V_R = 30\text{V}$
Junction Capacitance	C_j	—	175 25	—	pF pF	$V_R = 0\text{V}, f = 1.0\text{MHz}$ $V_R = 25\text{V}, f = 1.0\text{MHz}$

- Notes:
1. Valid Provided that terminals are kept at ambient temperature.
 2. $t_p < 300\mu\text{s}$, duty cycle $< 2\%$



Note: 1. Assumed application thermal conditions.
 $R\theta_{JA}$ varies depending on application.