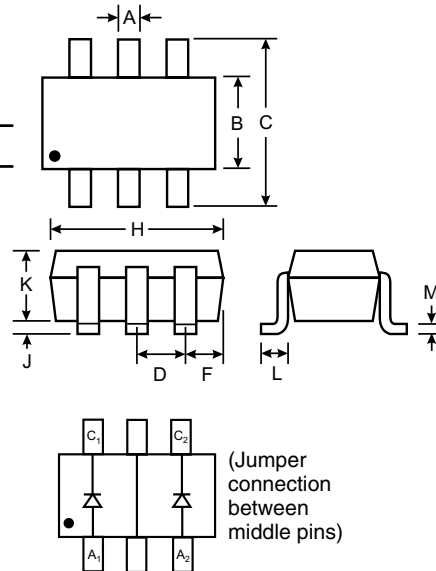


**Features**

- Low Forward Voltage Drop
- Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection

**Mechanical Data**

- Case: SOT-363, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Orientation: See Diagram
- Weight: 0.006 grams (approx.)
- Marking: K78



SOT-363		
Dim	Min	Max
A	0.10	0.30
B	1.15	1.35
C	2.00	2.20
D	0.65 Nominal	
E	0.30	0.40
G	1.80	2.20
H	1.80	2.20
J	—	0.10
K	0.90	1.00
L	0.25	0.40
M	0.10	0.25
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	$V_{RRM}$ $V_{RWM}$ $V_R$	70	V
RMS Reverse Voltage	$V_{R(RMS)}$	49	V
Forward Continuous Current (Note 1)	$I_{FM}$	70	mA
Non-Repetitive Peak Forward Surge Current @ $t < 1.0\text{s}$	$I_{FSM}$	100	mA
Power Dissipation (Note 1)	$P_d$	200	mW
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625	K/W
Operating and Storage Temperature Range	$T_j$ $T_{STG}$	-55 to +125 -65 to +125	$^\circ\text{C}$

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

Characteristic	Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage	$V_{FM}$	—	410 1000	mV mV	$t_p < 300\mu\text{s}$ , $I_F = 1.0\text{mA}$ $t_p < 300\mu\text{s}$ , $I_F = 15\text{mA}$
Maximum Peak Reverse Current	$I_{RM}$	—	100	nA	$t_p < 300\mu\text{s}$ , $V_R = 50\text{V}$
Junction Capacitance	$C_j$	—	2.0	pF	$V_R = 0\text{V}$ , $f = 1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$	—	5.0	ns	$I_F = I_R = 10\text{mA}$ to $I_R = 1.0\text{mA}$ , $I_{rr} = 0.1 \times I_R$ , $R_L = 100\Omega$

Notes: 1. Valid Provided that terminals are kept at ambient temperature.