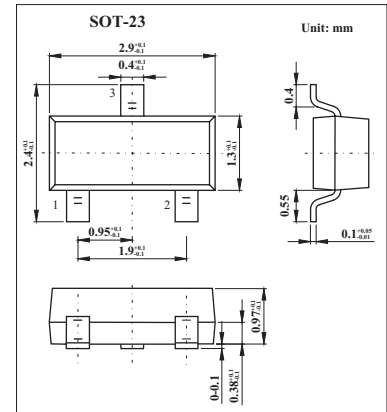
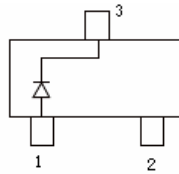


## Surface Mount Switching Diode

## DAN212K

## ■ Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

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

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	$I_O$	200	mA
Forward Continuous Current	$I_{FM}$	300	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0 \mu\text{s}$ @ $t = 1.0\text{s}$	$I_{FSM}$	2.0 1.0	A
Power Dissipation	$P_d$	225	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	556	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T, T_{STG}$	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100 \mu\text{A}$	75			V
Forward Voltage	$V_F$	$I_F = 1.0\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$			0.715 0.855 1.0 1.25	V
Leakage Current	$I_R$	$V_R = 75\text{V}$ $V_R = 20\text{V}$			1.0 25	$\mu\text{A}$ nA
Junction Capacitance	$C_j$	$V_R = 0, f = 1.0\text{MHz}$			2	pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$			4	ns

## ■ Marking

Marking	A6
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# DAN212K

■ Typical Characteristics

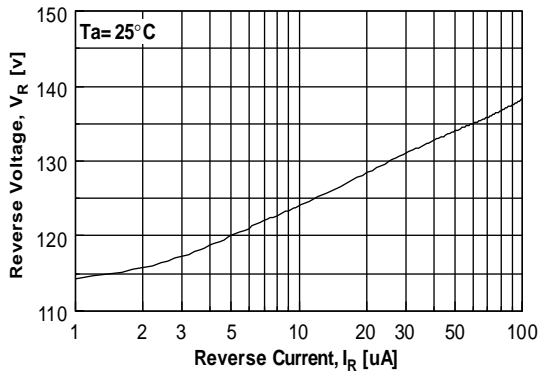


Figure 1. Reverse Voltage vs Reverse Current  
BV - 1.0 to 100 uA

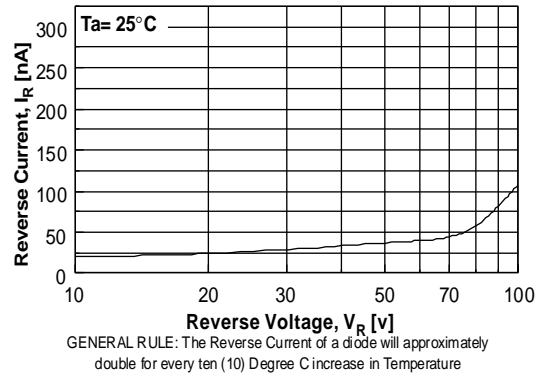


Figure 2. Reverse Current vs Reverse Voltage  
IR - 10 to 100 V

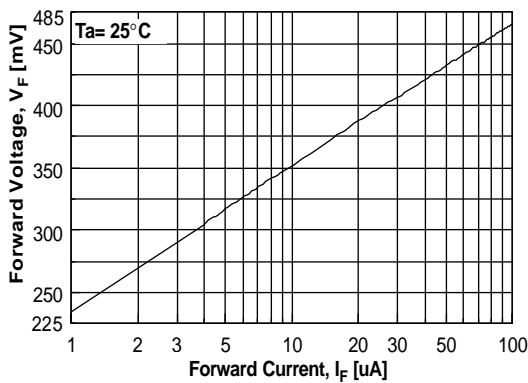


Figure 3. Forward Voltage vs Forward Current  
VF - 1.0 to 100 uA

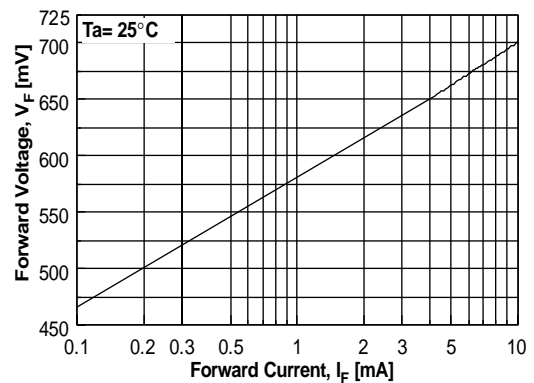


Figure 4. Forward Voltage vs Forward Current  
VF - 0.1 to 10 mA

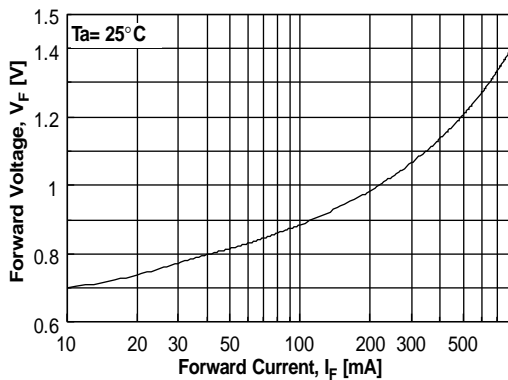


Figure 5. Forward Voltage vs Forward Current  
VF - 10 - 800 mA

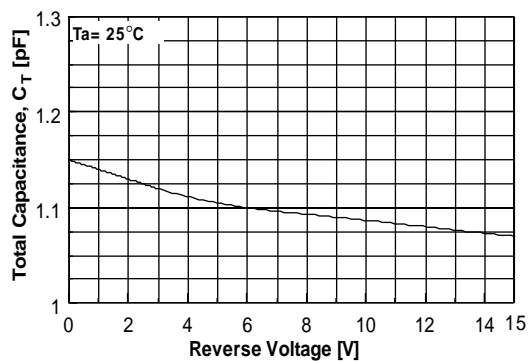
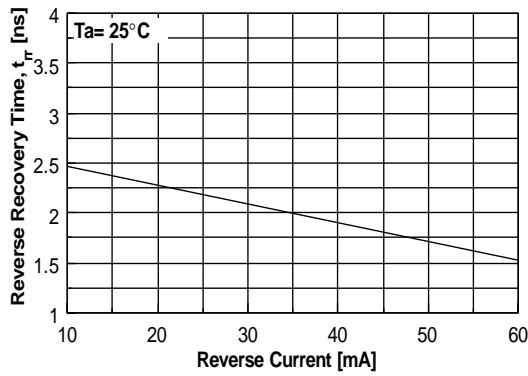
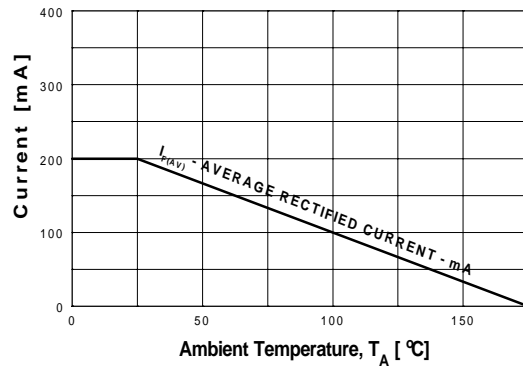


Figure 6. Total Capacitance

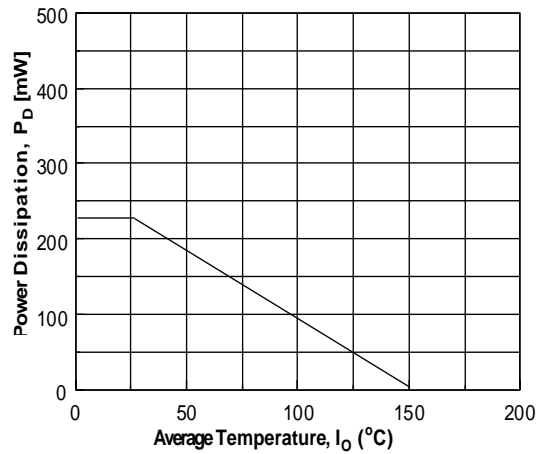
### DAN212K



**Figure 7. Reverse Recovery Time vs Reverse Current**  
TRR - IR 10 mA vs 60 mA



**Figure 8. Average Rectified Current ( $I_{F(AV)}$ ) versus Ambient Temperature ( $T_A$ )**



**Figure 9. Power Derating Curve**