



SOT-363 Plastic-Encapsulate Diodes

BAV99BDW

HIGH-SPEED SWITCHING DIODE

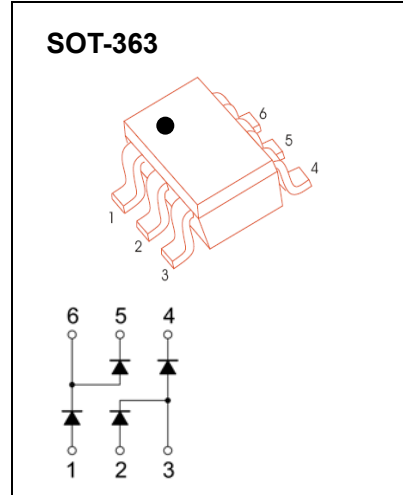
FEATURES

- Small Plastic Package
- Ultra High Speed Switching

APPLICATION

- For General Purpose Switching Application

MARKING: DN



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit	
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V	
V_{RRM}	Peak Repetitive Reverse Voltage	75		
V_{RWM}	Working Peak Reverse Voltage			
$V_{R(RMS)}$	RMS Reverse Voltage	53	V	
I_o	Average Rectified Output Current	215	mA	
I_{FSM}	Non-Repetitive Peak Forward Surge Current	@ $t \leq 1\mu\text{s}$	2	A
		@ $t \leq 1\text{s}$	1	A
P_D	Power Dissipation	200	mW	
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	625	$^{\circ}\text{C}/\text{W}$	
T_j	Junction Temperature	150	$^{\circ}\text{C}$	
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$	

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	75			V
Reverse current	I_R	$V_R=75\text{V}$			2.5	μA
		$V_R=20\text{V}$			25	nA
Forward voltage	V_F	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	
		$I_F=50\text{mA}$			1	
		$I_F=150\text{mA}$			1.25	
Total capacitance	C_{tot}	$V_R=0, f=1\text{MHz}$			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