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1N5817, 1N5818, 1N5819 Schottky Barrier Rectifier DO-41 Type Package

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$, Note 1 unless otherwise specified)

Maximum Repetitive Reverse Voltage, V_{RRM}

1N5817	20V
1N5818	30V
1N5819	40V

Average Forward Rectified Current (.375" (9.5mm) lead length at $T_L = +90^\circ\text{C}$), $I_{F(AV)}$ 1.0A

Non-Repetitive Peak Surge Current (8.3ms single half sine-wave), I_{FSM} 25A

Power Dissipation, P_D 1.25W

Operating Junction Temperature Range T_J -65° to $+125^\circ\text{C}$

Storage Temperature Range T_{stg} -65° to $+125^\circ\text{C}$

Maximum Thermal Resistance, Junction-to-Ambient (Note 2), R_{thJA} 100°C/W

Maximum Thermal Resistance, Junction-to-Case (Note 2), R_{thJC} 45°C/W

Note 1. These ratings are limiting values above which the serviceability of the device may be impaired.

Note 1. Mounted on Cu-pad Size 5mm x 5mm on PCB.

Electrical Characteristics: (Per Diode)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit	
Forward Voltage 1N5817	V_F	$I_F = 1\text{A}$	-	-	450	mV	
			-	-	550	mV	
			-	-	600	mV	
		1N5817	$I_F = 3\text{A}$	-	-	750	mV
				-	-	875	mV
				-	-	900	mV
Reverse Current	I_R	At rated V_R	$T_C = +25^\circ\text{C}$	-	-	0.5	mA
			$T_C = +100^\circ\text{C}$	-	-	10	mA
Total Capacitance	C_T	$V_R = 4\text{V}, f = 1\text{MHz}$	-	-	110	pF	

Note 3. Pulse test: Pulse Width = 300 μs , Duty Cycle = 2%.

