

MS503



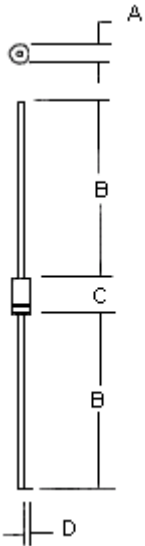
Schottky Rectifier Diode



Features:

- Schottky barrier rectifier.
- Guard ring protection.

Dimensions



	Minimum	Maximum
A	.188(4.78)	.260(6.50)
B	1.00(25.4)	-
C	.285(7.24)	.375(9.52)
D	.046(1.17)	.056(1.42)

Dimensions : Inches (Millimetres)

Electrical Characteristics

Parameter	Symbol	Test Conditions	Value	Units
Average forward current	$I_{F(AV)}$	$T_A = 123^\circ\text{C}$, square wave, $R\theta_{JL} = 11^\circ\text{C/W}$, $L = 1/8"$	5.0	Amps
		$T_A = 113^\circ\text{C}$, square wave, $R\theta_{JL} = 14.7^\circ\text{C/W}$, $L = 3/8"$		
Maximum surge current	I_{FSM}	8.3ms, half sine, $T_J = 150^\circ\text{C}$	300	
Maximum peak forward voltage	V_{FM}	$I_{FM} = 1.0\text{A}$: $T_J = 25^\circ\text{C}^*$	0.40	Volts
		$I_{FM} = 5.0\text{A}$: $T_J = 25^\circ\text{C}^*$	0.49	
Maximum peak reverse current	I_{RM}	V_{RRM} , $T_J = 25^\circ\text{C}$	250	μA
Typical junction capacitance	C_J	$V_R = 5.0\text{V}$, $T_J = 25^\circ\text{C}$	430	pF
Thermal and Mechanical Characteristics:				
Storage temperature range	T_{STG}	-	-40 to +150	$^\circ\text{C}$
Operating junction temperature range	T_J	-		
Maximum thermal resistance	$R\theta_{JL}$	$L = 3/8"$ (Junction to lead)	14.7	$^\circ\text{C/W}$
		$L = 1/8"$ (Junction to lead)	11.0	
Weight	-	-	0.032	Ounce Grams
			1	

*Pulse test: Pulse width 300 μ seconds, Duty Cycle 2%.



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Figure 1 Typical Forward Characteristics

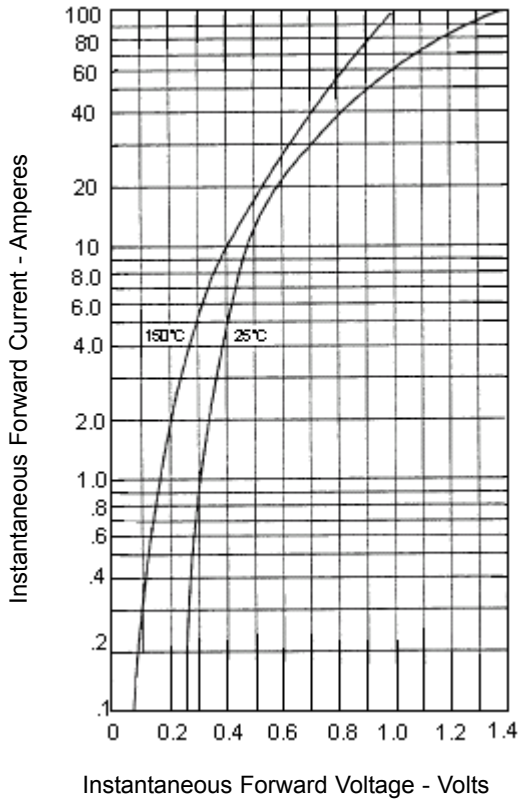


Figure 3 Typical Junction Capacitance

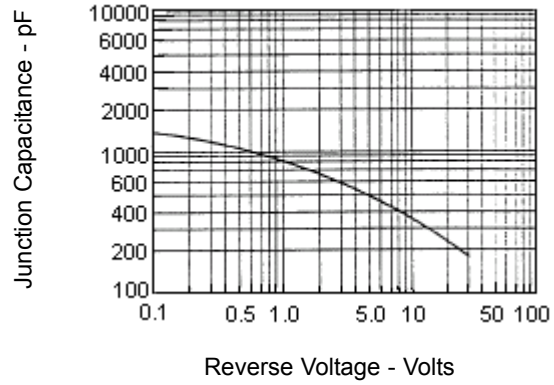
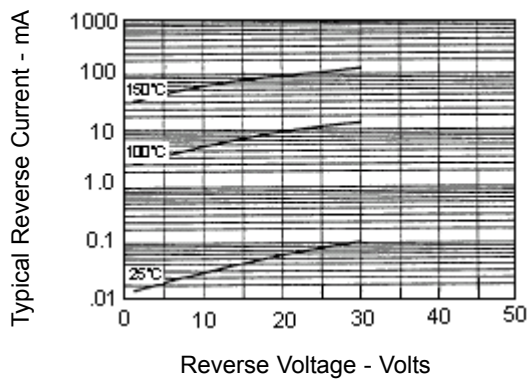


Figure 2 Typical Reverse Characteristics



Specifications

$I_{F(av)}$ maximum (A)	V_{RRM} maximum (V)	V_F (V) at $I_F = 5A$	I_{FSM} (A)	Package	Part Number
5	30	0.49	300	DO-201AD	MS503

Dimensions : Millimetres (Inches)