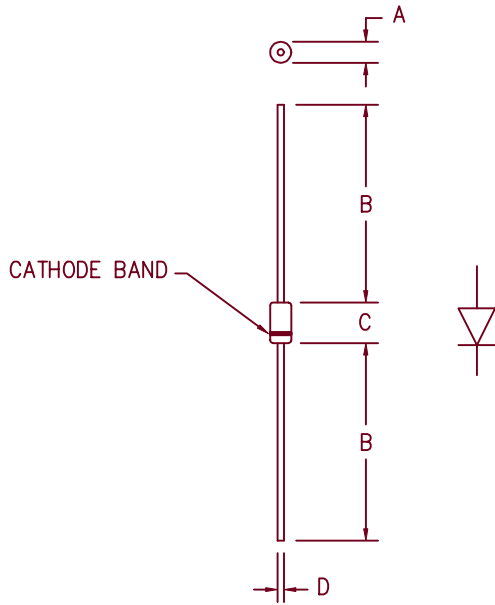


3 Amp Schottky Rectifier MSP345



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.188	.260	4.78	6.50	Dia.
B	1.00	---	25.4	---	
C	.285	.375	7.24	9.52	
D	.046	.056	1.17	1.42	Dia.

PLASTIC D0201AD

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	• Schottky Barrier Rectifier • Guard Ring Protection • Low Forward Voltage • 150°C Junction Temperature
MSP345	45V	45V	

Electrical Characteristics

Average forward current	$I_F(AV)$ 3.0 Amps	$T_A = 90^\circ C$, Square wave, $R_{\theta JL} = 52^\circ C/W$, $L = 3/8"$
Maximum surge current	I_{FSM} 150 Amps	8.3ms, half sine, $T_J = 150^\circ C$
Max peak forward voltage	V_{FM} .52 Volts	$I_{FM} = 3.0A; T_J = 25^\circ C^*$
Max peak reverse current	I_{RM} 1.5 mA	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	C_J 265 pF	$V_R = 5.0V, T_J = 25^\circ C$

*Pulse test: Pulse width 300 μ sec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	$-55^\circ C$ to $175^\circ C$
Operating junction temp range	T_J	$-55^\circ C$ to $150^\circ C$
Maximum thermal resistance $L = 0"$	$R_{\theta JC}$	$28^\circ C/W$ Junction to case
Maximum thermal resistance $L = 3/8"$	$R_{\theta JL}$	$52^\circ C/W$ Junction to lead
Weight		.032 ounces (1.0 grams) typical

MSP345

Figure 1
Typical Forward Characteristics

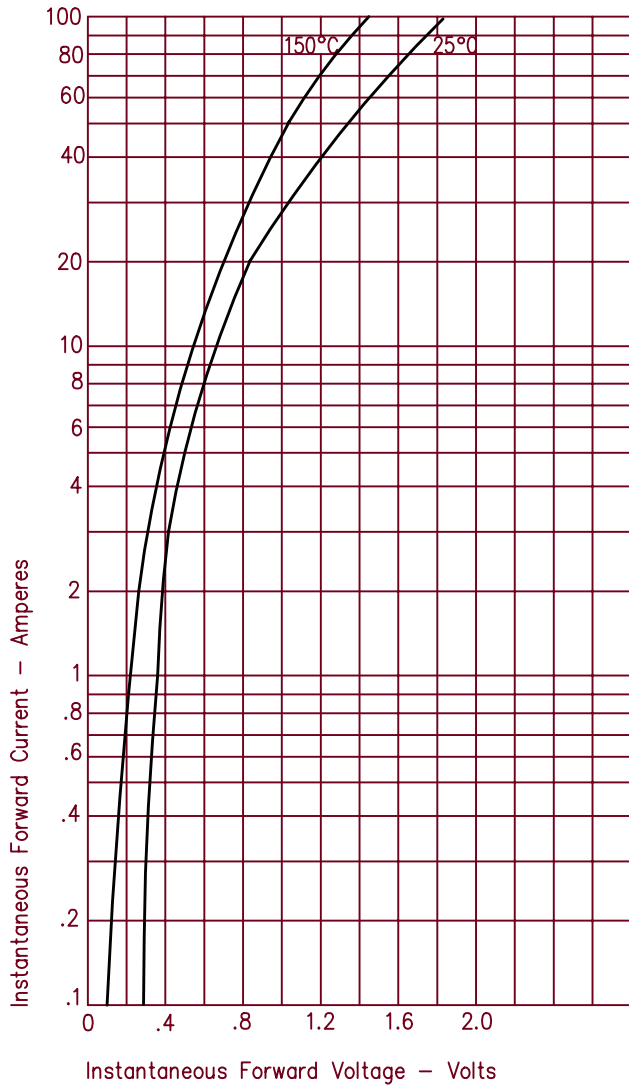


Figure 3
Typical Junction Capacitance

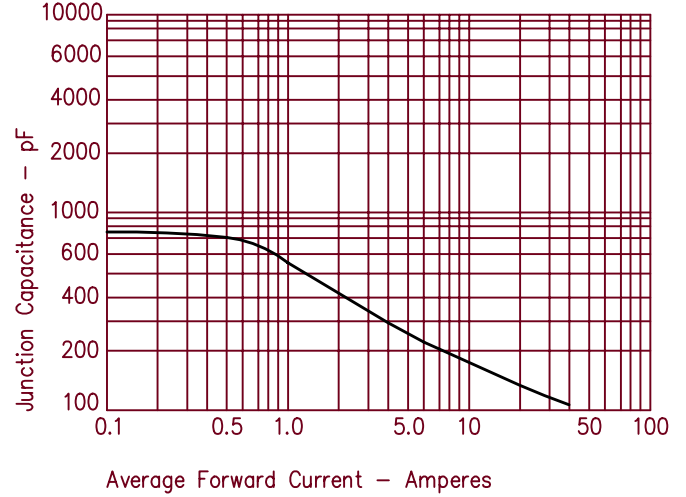


Figure 2
Typical Reverse Characteristics

