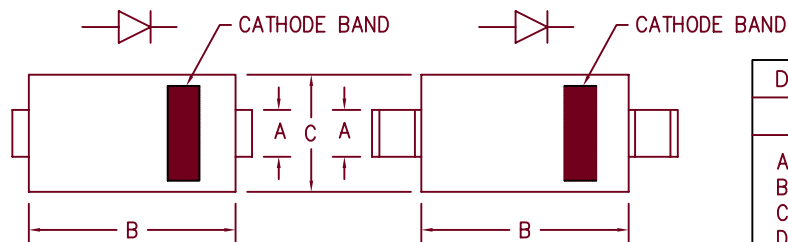


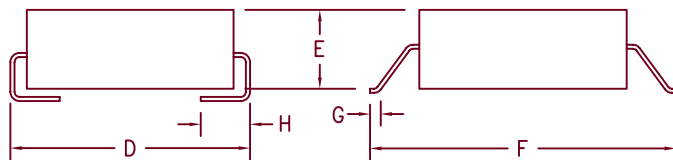
3 Amp Schottky Rectifier 5820SM — 5822SM



D0214AB

D0215AB

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.117	.123	2.97	3.12	
B	.260	.280	6.60	7.11	
C	.220	.245	5.59	6.22	
D	.307	.322	7.80	8.18	
E	.075	.095	1.91	2.41	
F	.380	.400	9.65	10.16	
G	.025	.040	.640	1.02	
H	.030	.060	.760	1.52	



Microsemi Catalog Number	Industry Part No.	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
5820SM*	MBRS320T3 SK32	20V	20V
5821SM*	MBRS330T3 SK33	30V	30V
5822SM*	MBRS340T3 SK34	40V	40V

*Add Suffix J For J Lead or G For Gull Wing Lead Configuration

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- High Reliability
- High Current Capability
- Surface mount package

Electrical Characteristics

		5820SM	5821SM	5822SM	
Average forward current	$I_F(AV)$	3A	3A	3A	Square wave, $T_L = 127^\circ C$, $R_{\theta JL} = 20^\circ C/W$
Maximum surge current	I_{FSM}	150A	150A	150A	8.3ms, half sine, $T_J = 150^\circ C$
Max peak forward voltage	V_{FM}	.36V	.37V	.38V	$I_{FM} = 1A$, $T_J = 25^\circ C^*$
Max peak forward voltage	V_{FM}	.46V	.48V	.50V	$I_{FM} = 3A$, $T_J = 25^\circ C^*$
Max peak forward voltage	V_{FM}	.65V	.67V	.70V	$I_{FM} = 9.4A$, $T_J = 25^\circ C^*$
Max peak reverse current	I_{RM}	1.5mA	1.5mA	1.5mA	V_{RRM} , $T_J = 25^\circ C$
Typical junction capacitance	C_J	265pF	265pF	265pF	$V_R = 5.0V$, $T_J = 25^\circ C$

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

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	$-55^\circ C$ to $150^\circ C$
Operating junction temp range	T_J	$-55^\circ C$ to $150^\circ C$
Maximum thermal resistance	$R_{\theta JL}$	$20^\circ C/W$ Junction to Lead
Weight		.008 ounces (.22 grams) typical



SCOTTSDALE

8700 East Thomas Road, P.O. Box 1390
Scottsdale, AZ 85252
PH: (480) 941-6300
FAX: (480) 947-1503
www.microsemi.com

05-09-07 Rev. 4

5820SM – 5822SM

Figure 1
Typical Forward Characteristics

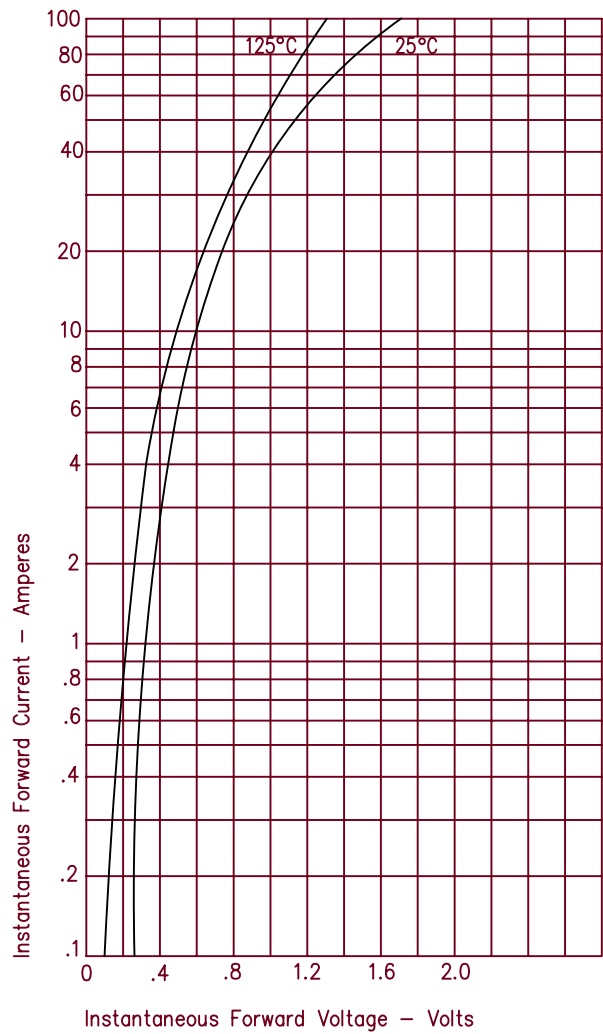


Figure 3
Typical Junction Capacitance

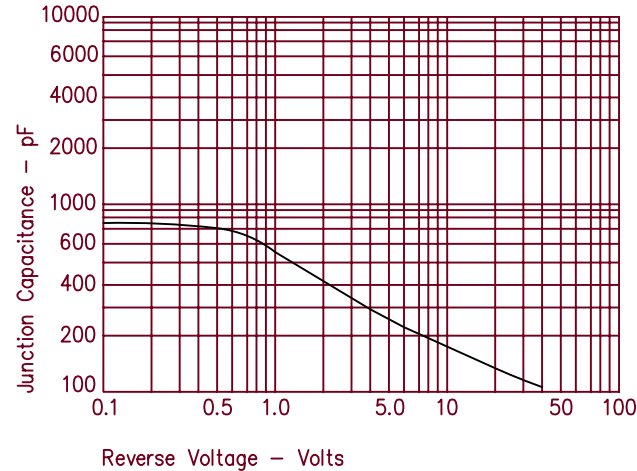
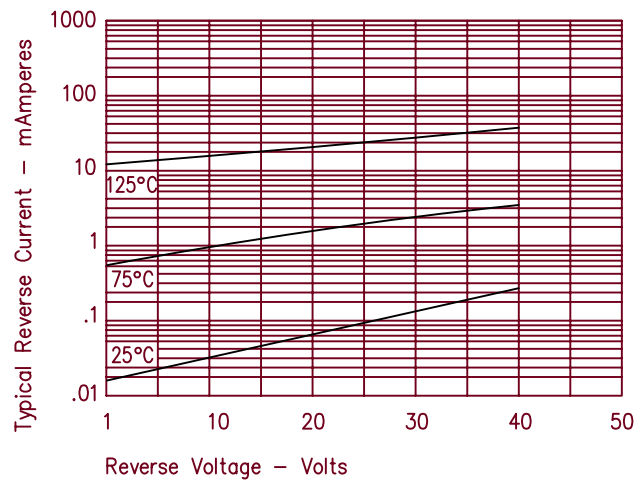


Figure 2
Typical Reverse Characteristics



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Microchip:](#)

[5822SMJ/TR13](#) [5820SMG/TR13](#) [5821SMGe3/TR13](#) [5821SMJ/TR13](#) [5822SMGe3/TR13](#) [5821SMJe3/TR13](#)