Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

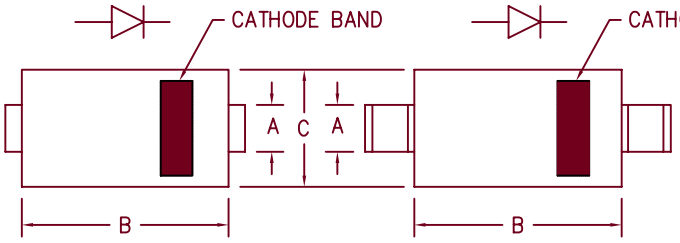
With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

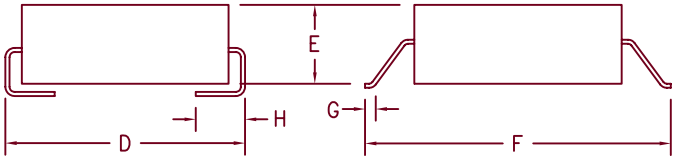
Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

3 Amp Schottky Rectifier
5820SM – 5822SM



DO214AB DO215AB



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
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°C, $R_{\theta JL}$ = 20°C/W
Maximum surge current	I_{FSM}	150A	150A	150A	8.3ms, half sine, T_J = 150°C
Max peak forward voltage	V_{FM}	.36V	.37V	.38V	I_{FM} = 1A, T_J = 25°C*
Max peak forward voltage	V_{FM}	.46V	.48V	.50V	I_{FM} = 3A, T_J = 25°C*
Max peak forward voltage	V_{FM}	.65V	.67V	.70V	I_{FM} = 9.4A, T_J = 25°C*
Max peak reverse current	I_{RM}	1.5mA	1.5mA	1.5mA	V_{RRM}, T_J = 25°C
Typical junction capacitance	C_J	265pF	265pF	265pF	V_R = 5.0V, T_J = 25°C

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Thermal and Mechanical Characteristics

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

SCOTTSDALE Microsemi
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

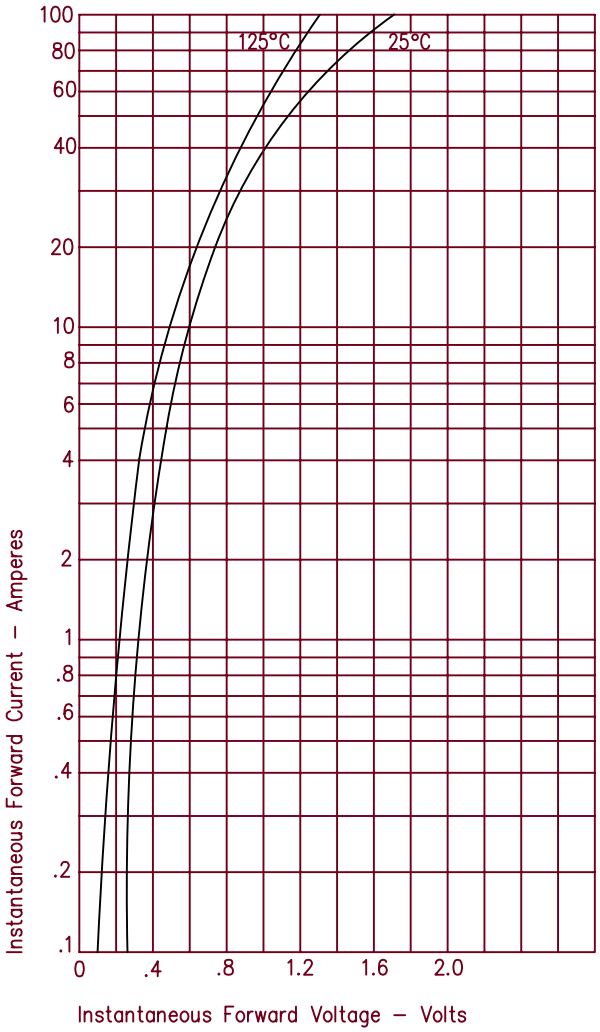


Figure 2
Typical Reverse Characteristics

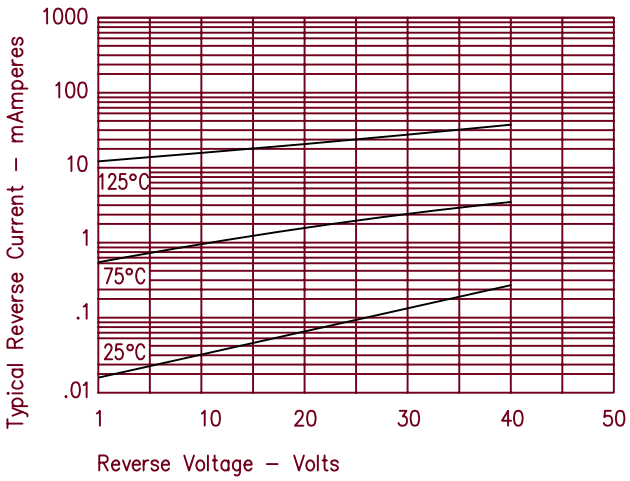


Figure 3
Typical Junction Capacitance