



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

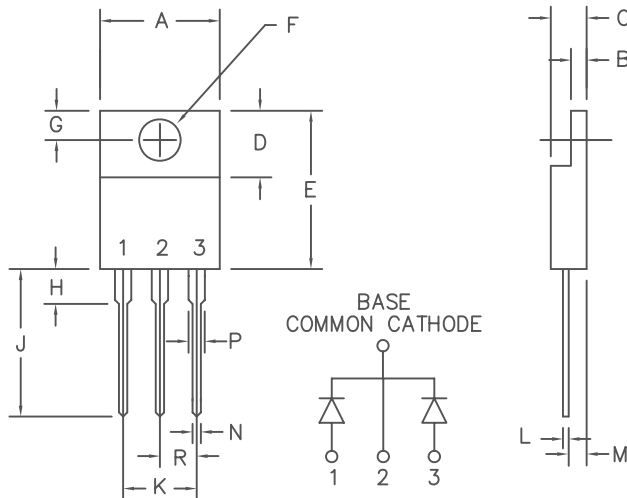
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20 Amp Schottky Rectifiers FST20120—FST20150



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.390	.415	9.91	10.54	
B	.045	.055	1.14	1.40	
C	.180	.190	4.57	4.83	
D	.245	.260	6.22	6.60	
E	.550	.650	13.97	16.51	
F	.139	.161	3.53	4.09	Dia.
G	.100	.135	2.54	3.43	
H	---	.250	---	6.35	
J	.500	.580	12.70	14.73	
K	.190	.210	4.83	5.33	
L	.014	.022	.357	.559	
M	.080	.115	2.03	2.92	
N	.015	.040	.380	1.02	
P	.045	.070	1.14	1.78	
R	.090	.110	2.29	2.79	

PLASTIC TO-220AB

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
FST20120		120V	120V
FST20130		130V	130V
FST20150	20CTQ150 MBR20H150CT	150V	150V

- Schottky barrier rectifier
- Guard ring for reverse protection
- 2 X 10 Amperes Avg.
- High surge capacity
- V_{RRM} 120–150 Volts

Electrical Characteristics

Average Forward Current per pkg.	$I_{F(AV)}$ 20 Amps	$T_C = 157^\circ\text{C}$, Square wave
Average Forward Current per leg	$I_{F(AV)}$ 10 Amps	$T_C = 157^\circ\text{C}$, Square wave
Maximum Surge Current per leg	I_{FSM} 225 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Maximum Surge Current per leg	$I_{R(OV)}$ 2 Amps	$f = 1\text{KHZ}$, 25°C , 1us square wave
Max. Peak Forward Voltage per leg	V_{FM} .83 Volts	$I_{FM} = 10\text{A}$, $T_J = 25^\circ\text{C}^*$
Max. Peak Forward Voltage per leg	V_{FM} .64 Volts	$I_{FM} = 10\text{A}$, $T_J = 175^\circ\text{C}^*$
Max. Peak Reverse Current per leg	I_{RM} 700 μA	V_{RRM} , $T_J = 125^\circ\text{C}^*$
Max. Peak Reverse Current per leg	I_{RM} 100 μA	V_{RRM} , $T_J = 25^\circ\text{C}$
Typical Junction Capacitance	C_J 280 pF	$V_R = 5.0\text{V}$, $T_J = 25^\circ\text{C}$

*Pulse test: Pulse width 300 usec. Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range	TSTG	-55°C to + 175°C
Operating junction temp range	T_J	-55°C to + 175°C
Max thermal resistance per leg	$R_{\theta JC}$	2.4°C/W Junction to case
Max thermal resistance per pkg.	$R_{\theta JC}$	1.2°C/W Junction to case
Typical thermal resistance (greased)	$R_{\theta CS}$	0.5°C/W Case to sink
Mounting torque		15 inch pounds maximum (6–32 screw)
Weight		.08 ounces (2.3 grams) typical



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05-17-07 Rev. 1

FST20120-FST20150

Figure 1
Typical Forward Characteristics – Per Leg

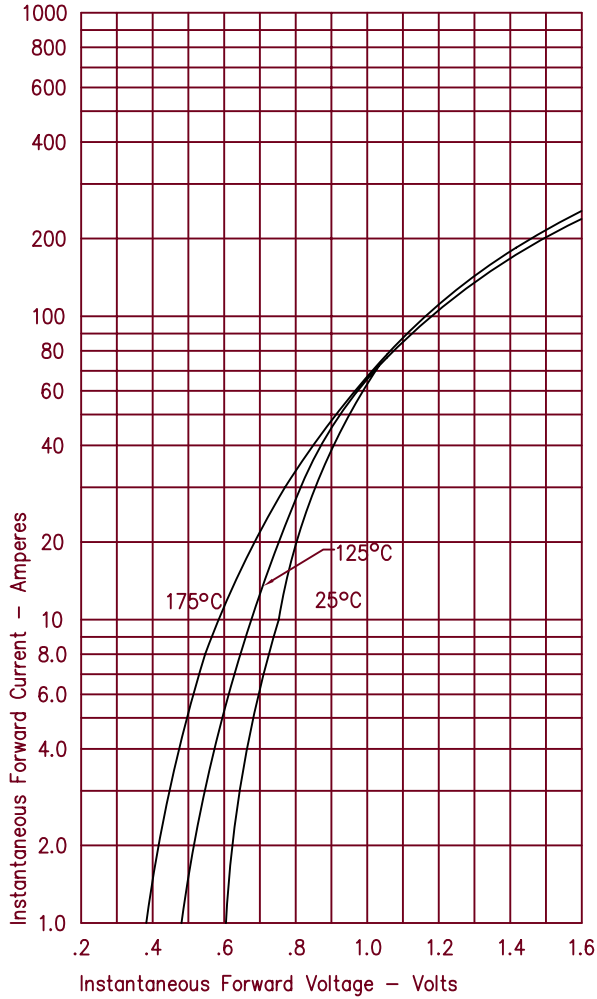


Figure 3
Typical Junction Capacitance – Per Leg

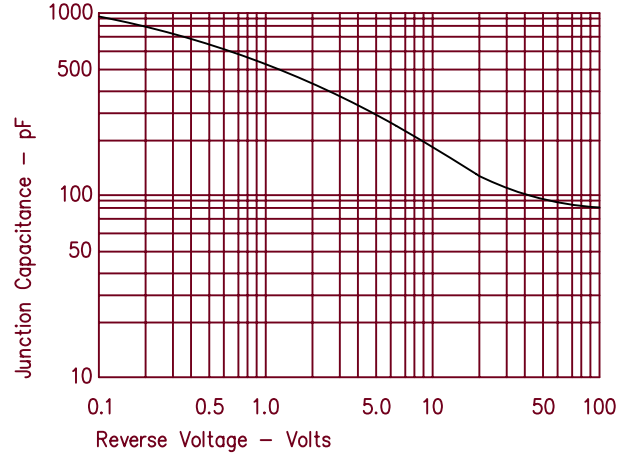


Figure 4
Forward Current Derating – Per Leg

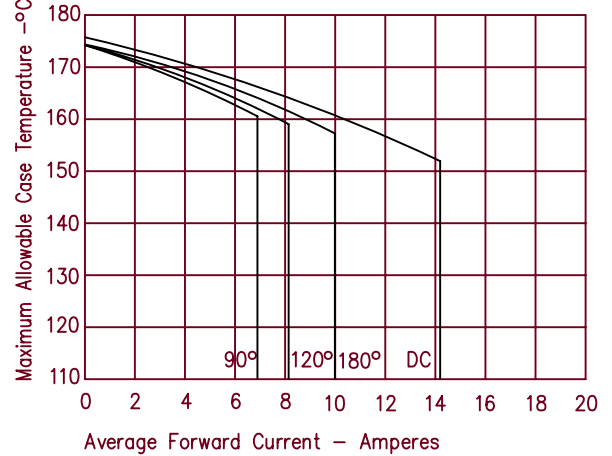


Figure 2
Typical Reverse Characteristics – Per Leg

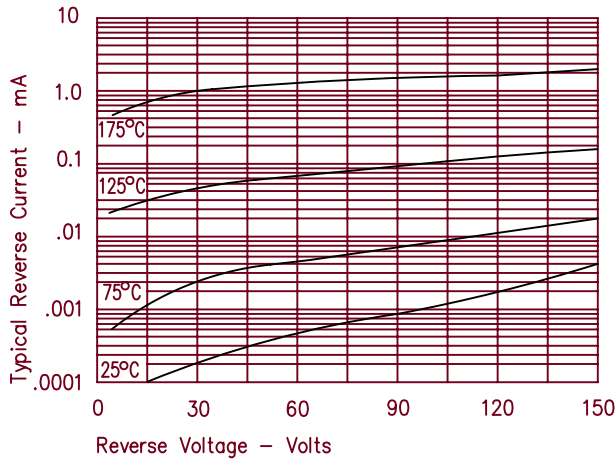


Figure 5
Maximum Forward Power Dissipation – Per Leg

