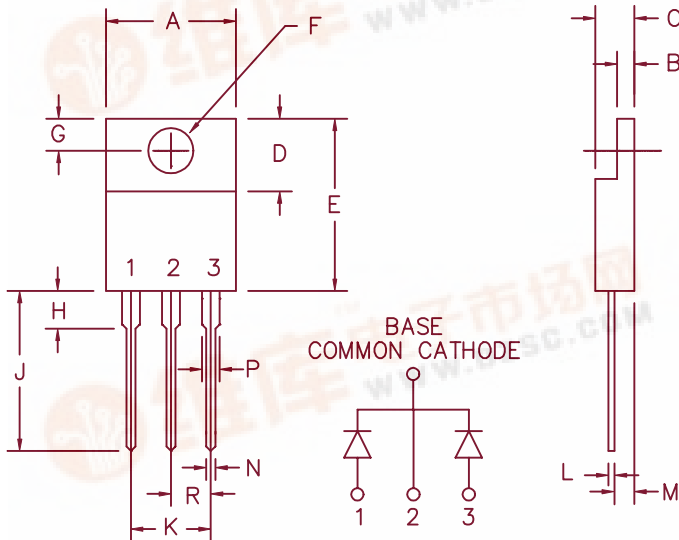


# 20 Amp Schottky Barrier Rectifiers

## FST2080 — FST20100

查询16C TQ050 供应商

捷多邦, 专业PCB打样工厂, 24小时加急出货



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

FST2080  
FST2090  
FST20100

Repetitive Peak Reverse Voltage

80V  
90V  
100V

Transient Peak Reverse Voltage

80V  
90V  
100V

- Schottky barrier rectifier
- Guard ring for reverse protection
- Low power loss, high efficiency
- High surge capacity
- $V_{RRM}$  80 to 100 Volts

### Electrical Characteristics

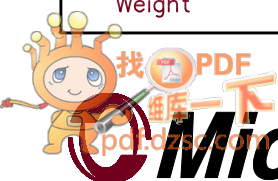
Average Forward Current per pkg.  $I_F(AV)$  20 Amps  
 Average Forward Current per leg  $I_F(AV)$  10 Amps  
 Maximum Surge Current per leg  $I_{FSM}$  225 Amps  
 Max. Peak Forward Voltage per leg  $V_{FM}$  .66 Volts  
 Max. Peak Forward Voltage per leg  $V_{FM}$  .85 Volts  
 Max. Peak Reverse Current per leg  $I_{RM}$  10 mA  
 Max. Peak Reverse Current per leg  $I_{RM}$  250  $\mu$ A  
 Typical Junction Capacitance  $C_j$  440 pF

$T_C = 128^\circ\text{C}$ , Square wave,  $R_{\theta JC} = 2.8^\circ\text{C/W}$   
 $T_C = 128^\circ\text{C}$ , Square wave,  $R_{\theta JC} = 5.6^\circ\text{C/W}$   
 8.3ms, half sine,  $T_J = 175^\circ\text{C}$   
 $I_{FM} = 10\text{A}$ ,  $T_J = 175^\circ\text{C}^*$   
 $I_{FM} = 10\text{A}$ ,  $T_J = 25^\circ\text{C}^*$   
 $V_{RRM}$ ,  $T_J = 125^\circ\text{C}^*$   
 $V_{RRM}$ ,  $T_J = 25^\circ\text{C}$   
 $V_R = 5.0\text{V}$ ,  $T_J = 25^\circ\text{C}$

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

### Thermal and Mechanical Characteristics

Storage temp range TSTG  $-55^\circ\text{C}$  to  $+175^\circ\text{C}$   
 Operating junction temp range  $T_J$   $-55^\circ\text{C}$  to  $+175^\circ\text{C}$   
 Max thermal resistance per leg  $R_{\theta LC}$   $5.6^\circ\text{C/W}$   
 Max thermal resistance per pkg.  $R_{\theta JC}$   $2.8^\circ\text{C/W}$   
 Typical thermal resistance per leg  $R_{\theta LC}$   $4.7^\circ\text{C/W}$   
 Mounting torque 15 inch pounds maximum (6-32 screw)  
 Weight .08 ounces (2.3 grams) typical



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1-27-00 Rev. 1

# FST2080 — FST20100

Figure 1  
Typical Forward Characteristics — Per Leg

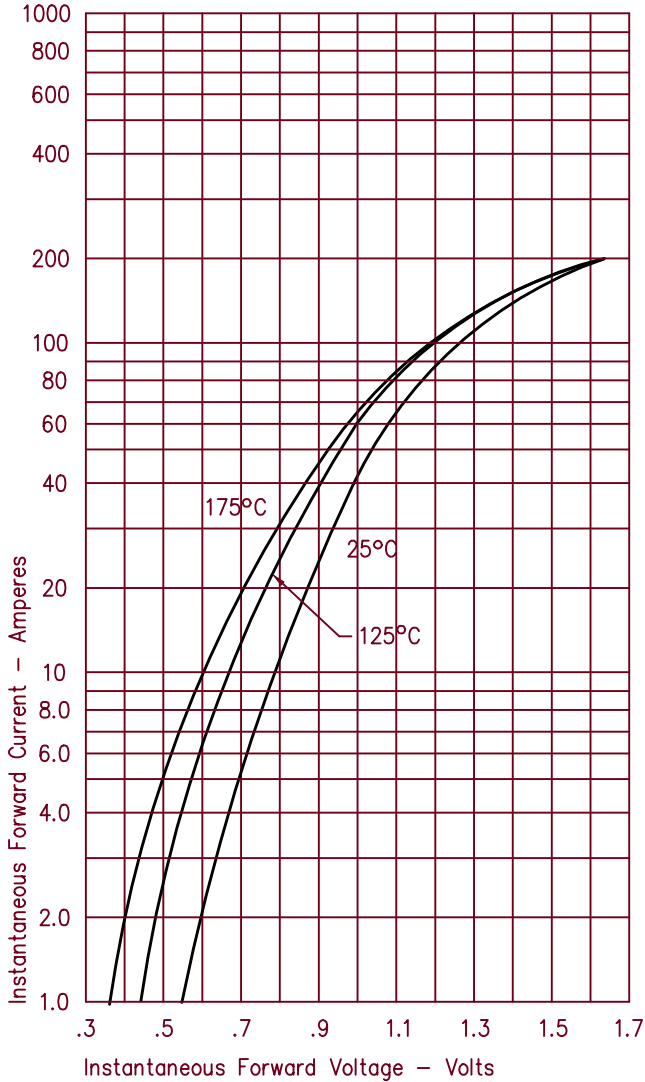


Figure 3  
Typical Junction Capacitance — Per Leg

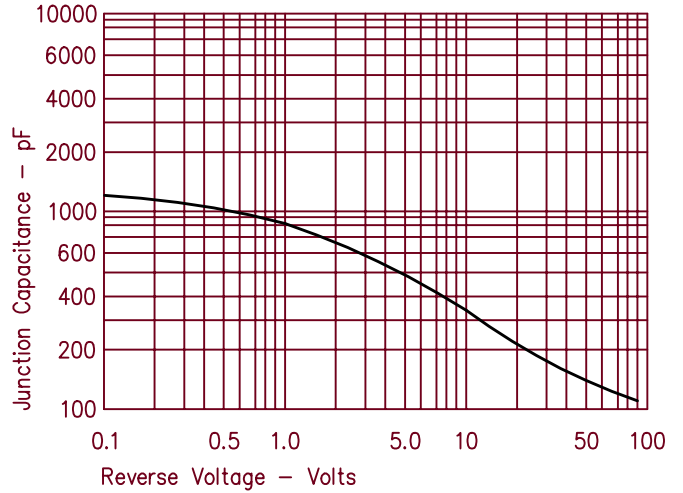


Figure 4  
Forward Current Derating — Per Leg

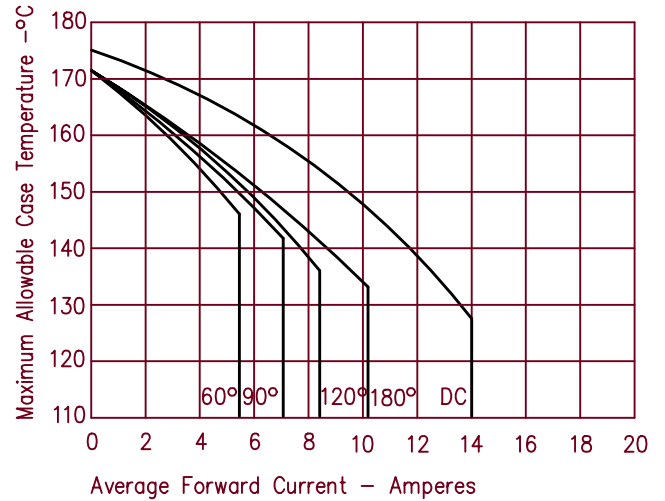


Figure 2  
Typical Reverse Characteristics — Per Leg

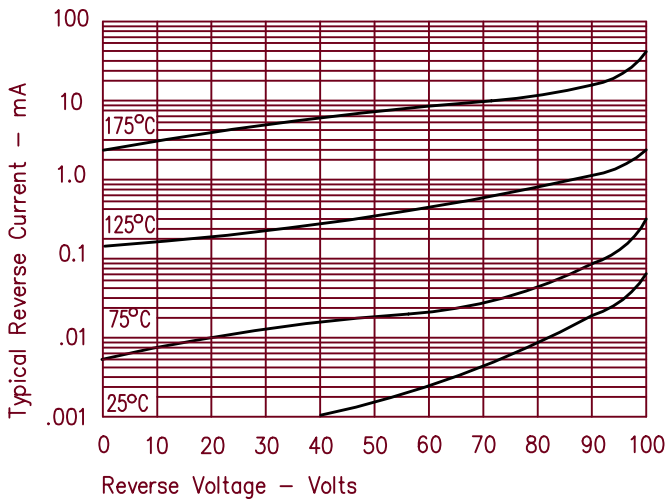


Figure 5  
Maximum Forward Power Dissipation — Per Leg

