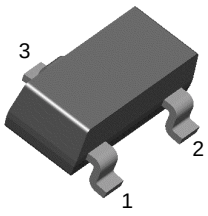
FAIRCHILD
SEMICONDUCTOR®

FYV0203S/DN/DP/DS



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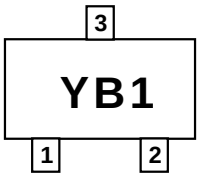
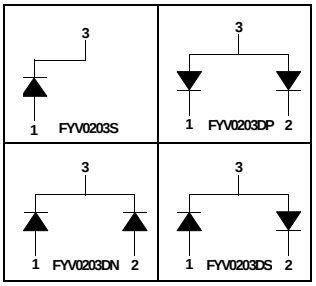


Marking

FYV0203S = YB1 FYV0203DP = YB3
FYV0203DN = YB2 FYV0203DS = YB4

Connection Diagram



Schottky Diode

Absolute Maximum Ratings T_A=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	30	V
$I_{F(AV)}$	Average Rectified Forward Current	0.2	A
I_{FSM}	Non-repetitive Peak Surge Current Pulse Width = 1.0s	0.6	A
T_{STG}	Storage Temperature Range	-65 to +150	°C
T_J	Operating Junction Temperature	150	°C

Thermal Characteristics

Symbol	Parameter	Value	Units
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	430	°C/W

Electrical Characteristics T_A=25°C unless otherwise noted

Symbol	Parameter		Min.	Typ.	Max.	Units
V_F *	Forward Voltage Drop					mV
	I_F = 0.1mA		-	210	240	
	I_F = 1mA		-	270	320	
	I_F = 10mA		-	340	400	
	I_F = 30mA		-	390	500	
	I_F = 100mA		-	485	800	
	I_F = 200mA		-	600	1000	
I_R *	Reverse Current					uA
	@ Rated V_R	T_A = 25 °C	-	0.2	2	
		T_A= 125 °C	-	130	-	
C_T	Total Capacitance					pF
	V_R = 1V , f = 1.0 MHz		-	-	10	
t_{rr}	Reverse Recovery Time					ns
	I_F = I_R = 10mA, I_{RR} = 1mA, R_L = 100Ω		-	-	5	

* Pulse Test: Pulse Width=300μs, Duty Cycle=2%

Typical Characteristics

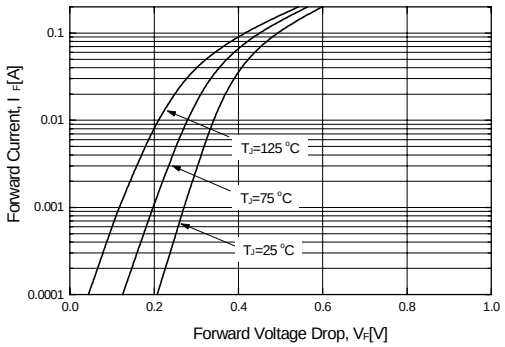


Figure 1. Typical Forward Voltage Characteristics

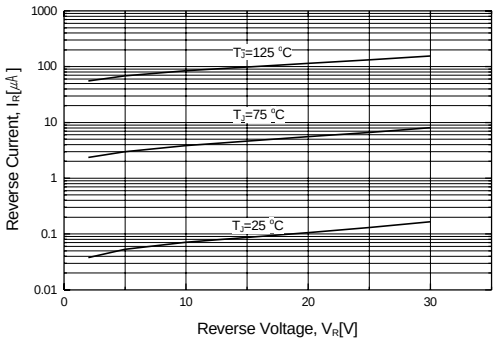


Figure 2. Typical Reverse Current vs. Reverse Voltage

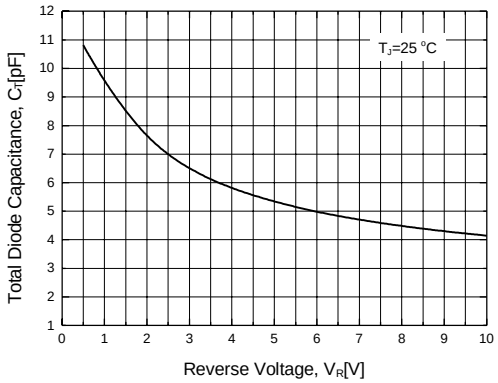


Figure 3. Total Diode Capacitance

Package Dimensions

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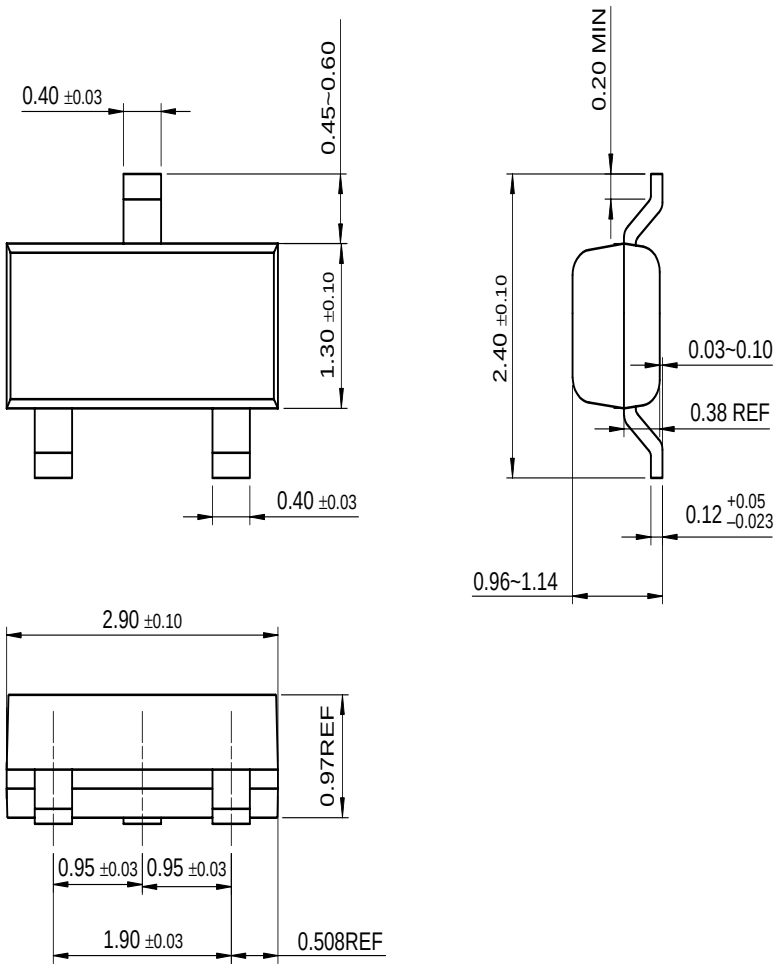

Dimensions in Millimeters

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DenseTrench™	GTO™	Power247™	SuperSOT™-6	
DOME™	HiSeC™	PowerTrench®	SuperSOT™-8	
EcoSPARK™	ISOPLANAR™	QFET™	SyncFET™	
E^2CMOS™	LittleFET™	QS™	TruTranslation™	
EnSigna™	MicroFET™	QT Optoelectronics™	TinyLogic™	
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