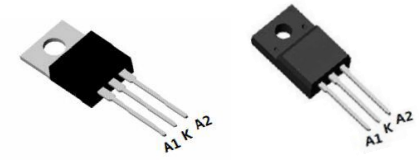
WSB20100T/WSB20100TF

Power Schottky Barrier Rectifier

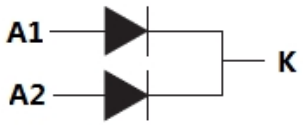
www.sh-willsemi.com

Features

- 2x10A average rectified forward current
- Low forward voltage and Low leakage current
- Excellent high junction temperature stability
- High forward surge capability



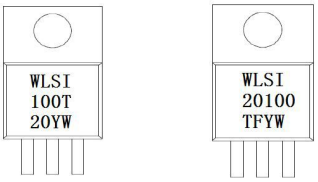
TO-220 **TO-220F**



Circuit

Applications

- High frequency switch model power supplies
- DC-DC Convertors, Power adapters



TO-220 **TO-220F**

Marking

Absolute maximum ratings					
Parameter			**Symbol**	**Value**	**Unit**
Reverse voltage (repetitive peak)			V_{RM}	100	V
Reverse voltage (DC)			V_R	100	V
Average rectified forward current		Per diode	I_F	10	A
		Per device	I_F	20	A
Peak Forward Surge Current (1)			I_{FSM}	100	A
Junction temperature			T_J	150	^{0}C
Operating temperature			Topr	-55 ~ 150	^{0}C
Storage temperature			Tstg	-55 ~ 150	^{0}C
Thermal Resistance Ratings					
Maximum Thermal Resistance Junction To case (Per leg)	TO-220		$R_{\theta JC}$	2.2	°C/W
	TO-220F			4.4	

Order information			
Device	**Package**	**Marking**	**Units/Tube**
WSB20100T-3/T	TO-220	WLSI100T20YW (2)	50
WSB20100TF-3/T	TO-220F	WLSI20100TFYW (3)	

Note 1 : Pulse Width=8.3ms，Single Sine Pulse

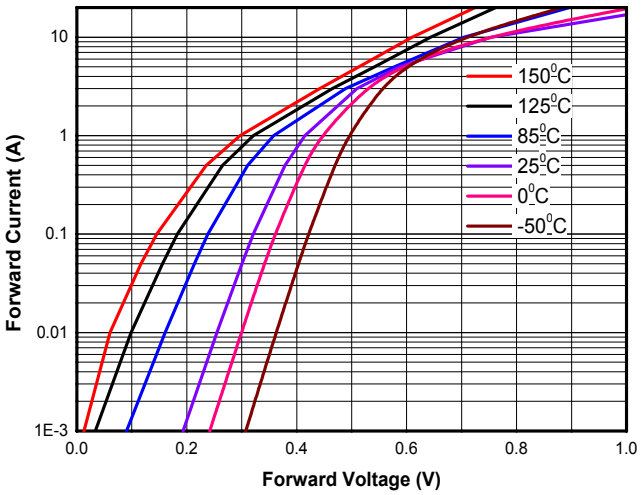
Note 2 : WLSI=Willsemi; 100T= Device code;20=Special Code; Y=Year; W=Week (A~z)

Note 3 : WLSI=Willsemi; 20100= Device code; TF=Special Code; Y=Year; W=Week (A~z)

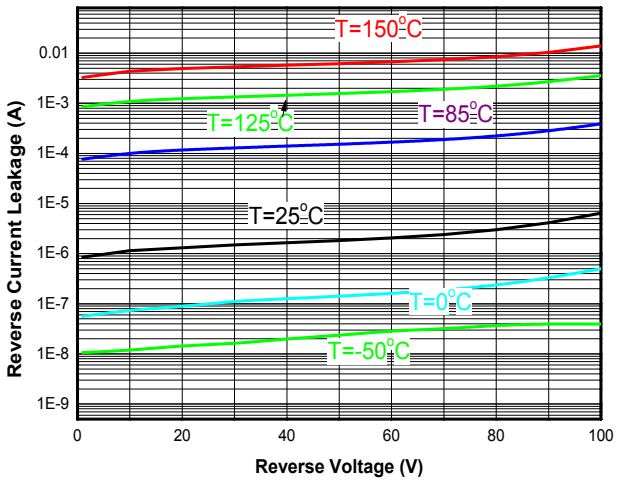
Electronics characteristics (T_A=25°C, Per diode)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V_R	I_R=0.5mA	100			V
Forward voltage	V_F	I_F=10A			0.85	V
Reverse current	I_R	V_R=100V	-		0.1	mA
Junction capacitance	C_J	V_R=25V, F=1MHz	-	110		pF

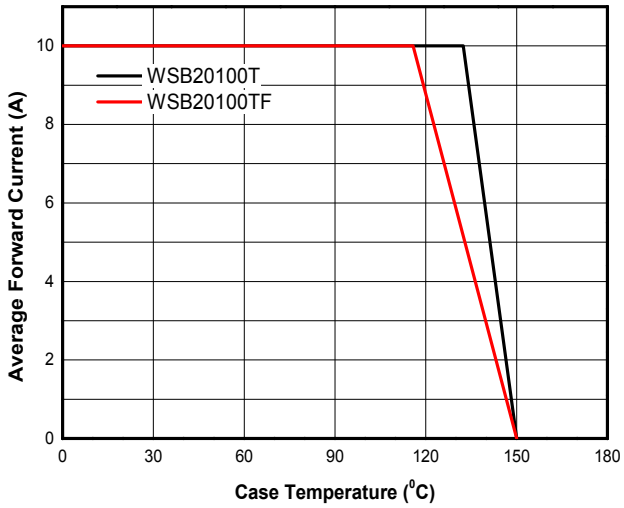
Typical characteristics (Ta=25°C, Per diode)



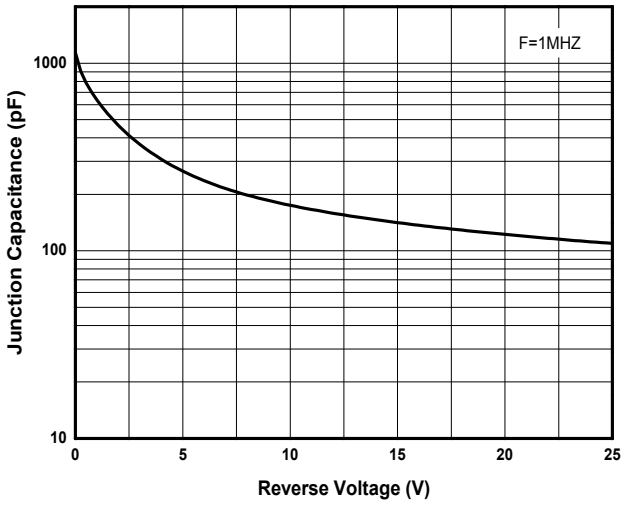
Forward voltage vs. Forward current



Reverse current vs. Reverse voltage



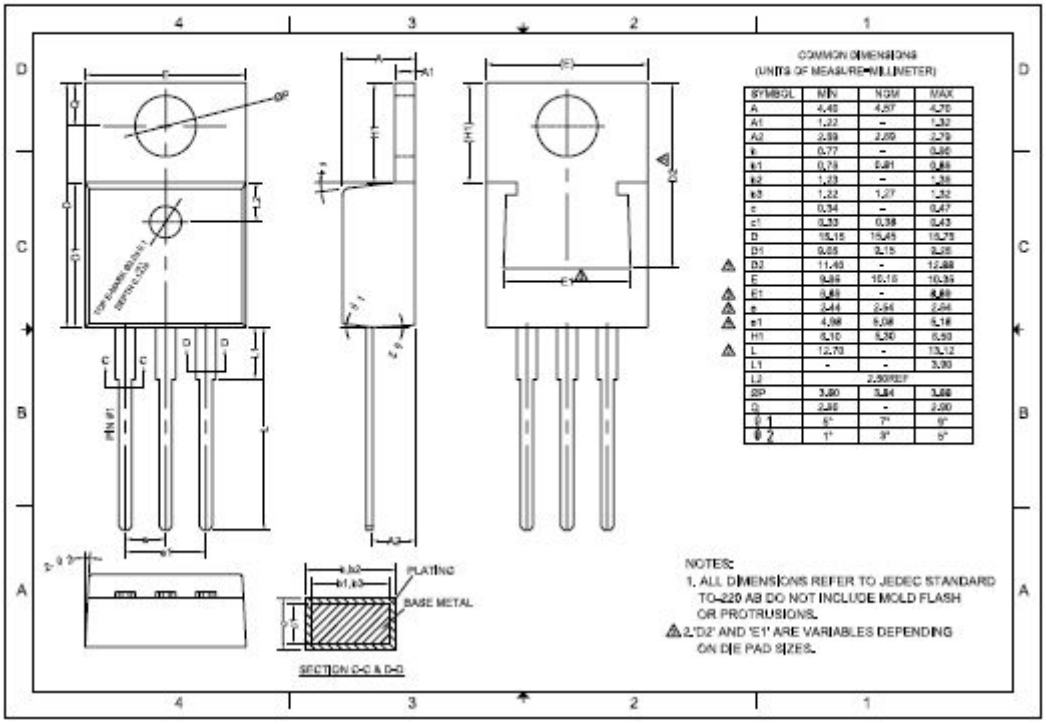
Forward Current Derating Curve



Junction capacitance vs. Reverse voltage

Package outline dimensions

TO-220



TO-220F