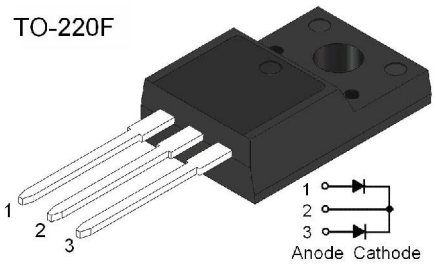
20A Schottky Barrier Rectifier

Features:

- Average Output Rectified Current : I_O = 20A.
- Repetitive Peak Reverse Voltage : V_{RRM} =100V



Absolute Maximum Ratings (T_A = 25°C unless otherwise noted)

Parameter		Symbol	Value	Units
Peak Repetitive Reverse Voltage		V_{RRM}	100	V
RMS reverse voltage		$V_{R(RMS)}$	70	V
Average Output Rectified Current	Per Leg	I_O	10	A
	Total		20	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I_{FSM}	150	A
Operating Juniction Temperature		T_J	125	℃
Storage Temperature		T_{STG}	-55～+150	℃
Typical Thermal Resistance junction to case(Note1)		$R_{\theta jc}$	4	℃/W

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Test Condition	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	I_R= 0.1mA	100			V
Maximum Instantaneous Reverse Current	I_R	V_R=100V,T_A = 25℃ V_R=100V,T_S = 125℃			3.5 4.5	μA mA
Forward Voltage (Note2)	V_F	I_F = 10A, T_A = 25℃ I_F = 10A, T_A = 125℃ I_F = 20A, T_A = 25℃ I_F = 20A, T_A = 125℃			0.85 0.75 0.95 0.85	V

Note1: Thermal Resistance from Junction to Case Per Leg

Note2: Pulse Test : 300us Pulse Width, 1% Duty cycle

Electrical characteristics

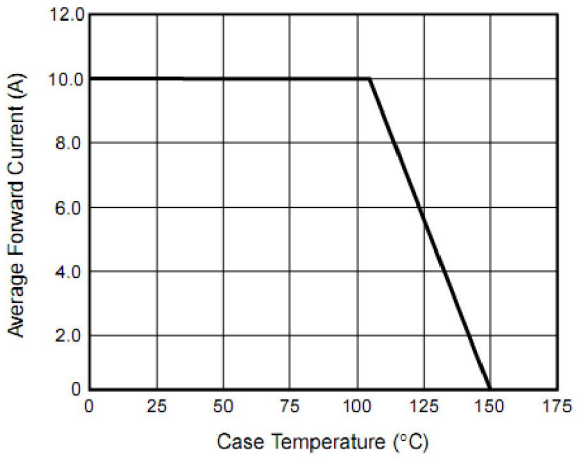


Figure 1. Maximum forward current derating

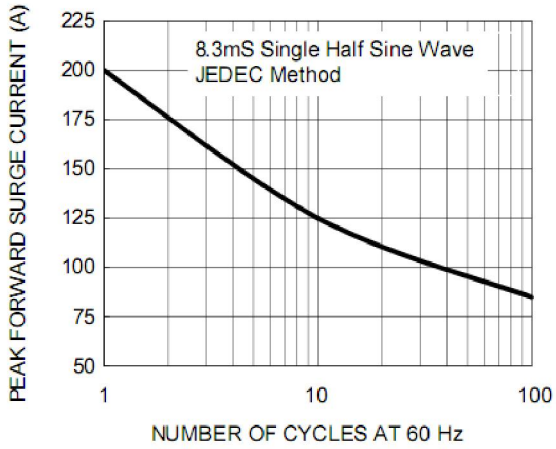


Figure 2. Maximum Non-repetitive forward rurge current per leg

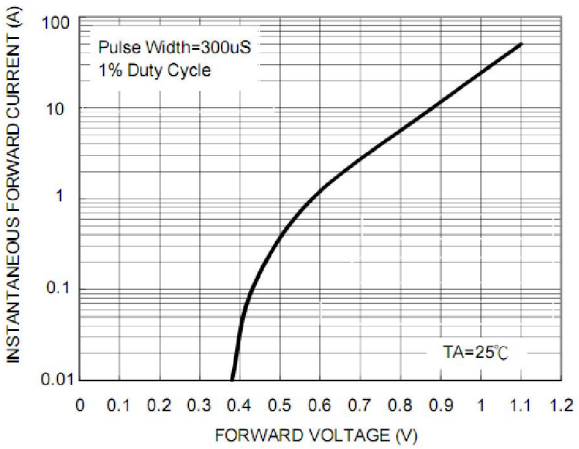


Figure 3. Typical forward characteristics per leg

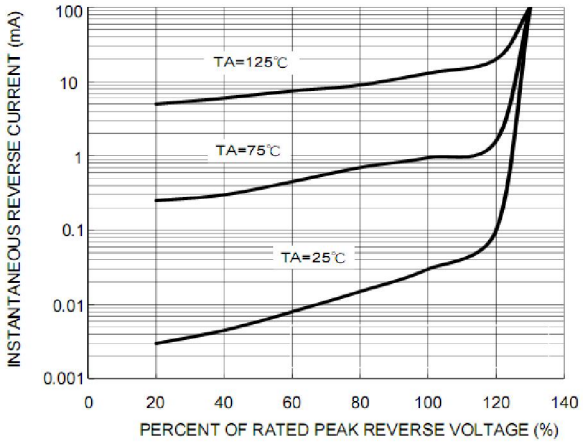


Figure 4. Typical reverse characteristics per leg

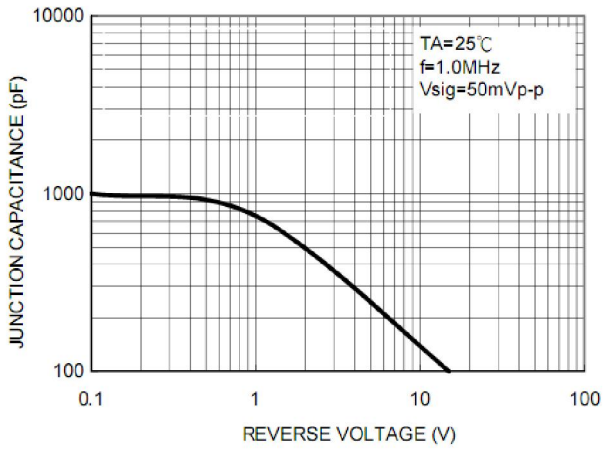


Figure 5. Typical junction capacitance per leg

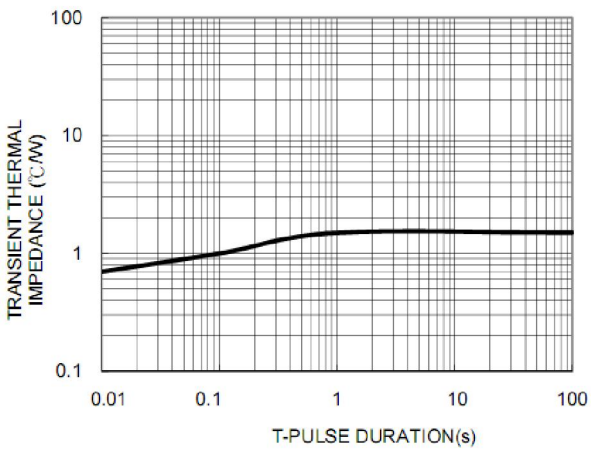
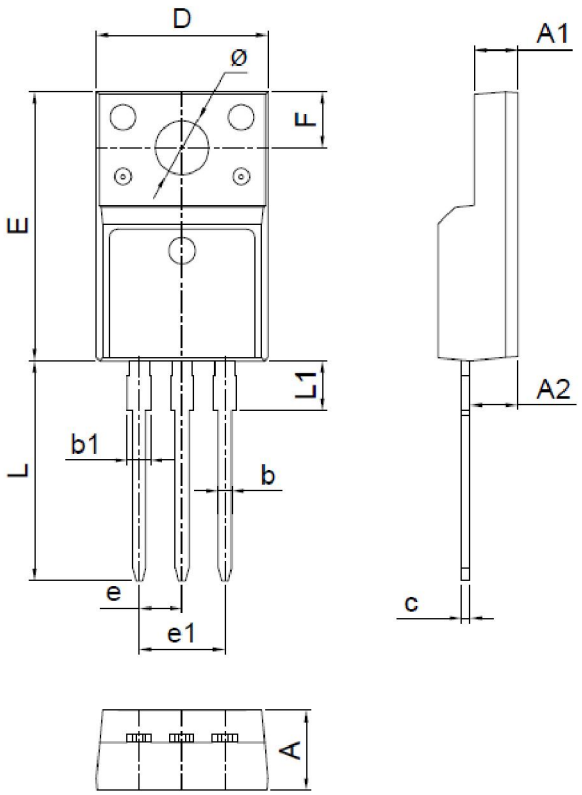


Figure 6. Typical transient thermal impedance per leg

Package Dimensions



Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.50	4.90	0.177	0.193
A1	2.34	2.74	0.092	0.108
A2	2.66	2.86	0.105	0.113
b	0.75	0.85	0.030	0.033
b1	1.24	1.44	0.049	0.057
c	0.40	0.60	0.016	0.024
D	10.00	10.32	0.394	0.406
E	15.75	16.05	0.620	0.632
e	2.44	2.64	0.096	0.104
e1	4.88	5.28	0.192	0.208
F	3.10	3.5	0.122	0.138
L	12.90	13.50	0.508	0.531
L1	2.90	3.30	0.114	0.130
Φ	3.10	3.30	0.122	0.130