

Power Schottky Rectifier - 10Amp 150Volt

Features

- Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- High Junction Temperature Capability
- Low forward voltage, high current capability
- High surge capacity
- Low power loss, high efficiency

Application

- AC/DC Switching Adaptor
- Switch-Mode Power Supply

Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
$I_F(AV)$	10	A	At $T_c=125^\circ C$
V_{RRM}	150	V	Maximum repetitive peak reverse voltage
I_{FSM}	120	A	8.3ms single half sine-wave single shot
$V_F(max)$	0.92	V	At $I_F=5A, T_c=25^\circ C$
T_j	-50 to +175	$^\circ C$	
T_{stg}	-50 to +150	$^\circ C$	

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V_F	0.92V	$T_c=25^\circ C$
Forward Voltage		0.75V	$T_c=125^\circ C$
Maximum Reverse Current At Rated DC Blocking Voltage	I_R	50 μA 10mA	$T_c=25^\circ C$ $T_c=125^\circ C$
Voltage Rate of Change	dv/dt	10,000 V/ μs	Rated VR

Note: (1)Pulse Test : 380 μs pulse width, 2% duty cycle

ITO-220AB

DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.577	.600	14.65	15.25	
B	.386	.406	9.80	10.30	
C	.102	.114	2.60	2.90	
D	.258	.274	6.55	6.95	
E	.315	.331	8.00	8.40	
F	.148	.159	3.75	4.05	
G	.508	.531	12.90	13.50	
H	.089	.100	2.25	2.55	
I	.022	.028	0.55	0.70	
J	.022	.028	0.55	0.70	
K	.126	.138	3.20	3.50	
L	.173	.185	4.40	4.70	
M	.055	.063	1.40	1.60	
N	.102	.114	2.60	2.90	

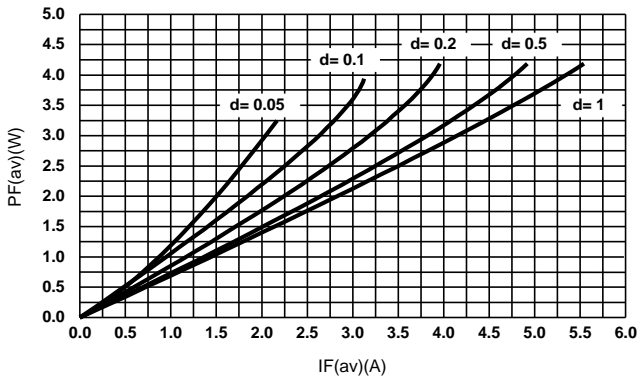


Figure 1. Average forward power dissipation versus average forward current (per diode)

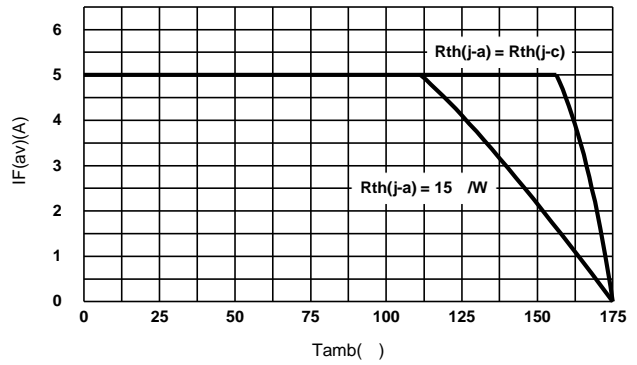


Figure 2. Average forward current versus ambient temperature (d = 0.5, per diode)

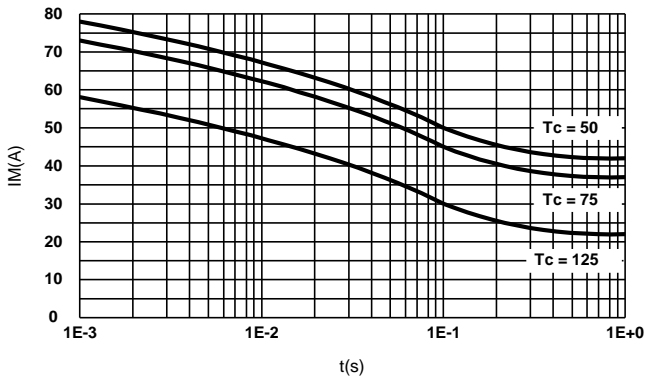


Figure 3. Non repetitive surge peak forward current versus overload duration (maximum values, per diode)

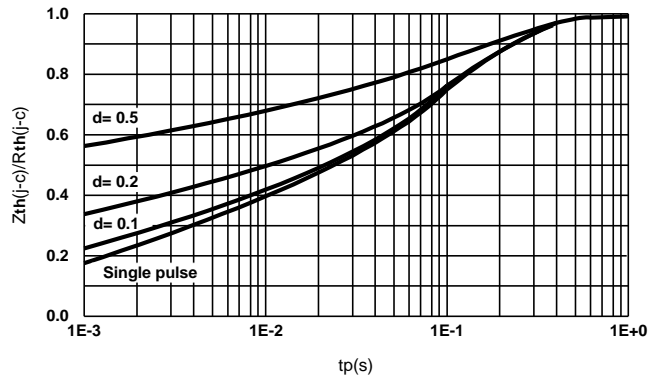


Figure 4. Relative variation of thermal impedance junction to case versus pulse duration (per diode)

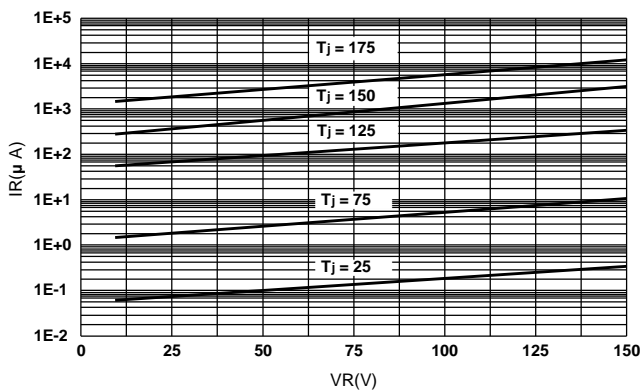


Figure 5. Reverse leakage current versus reverse voltage applied (typical values, per diode)

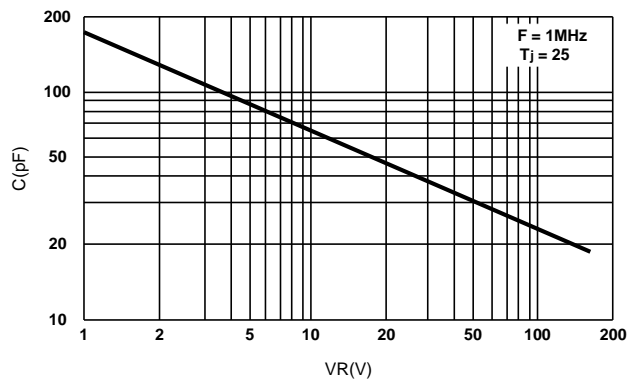


Figure 6. Junction capacitance versus reverse voltage applied (typical values, per diode)

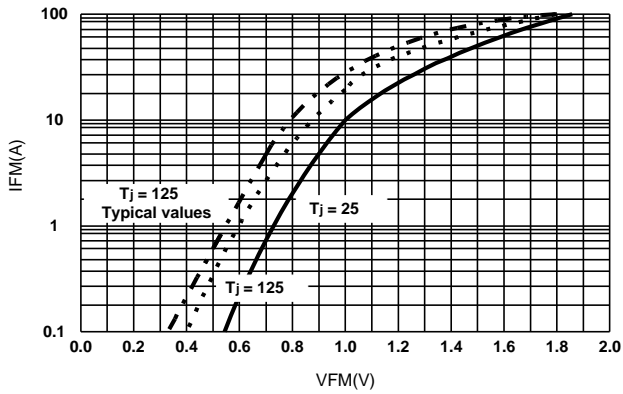


Figure 7. Forward voltage drop versus forward current (maximum values, per diode)

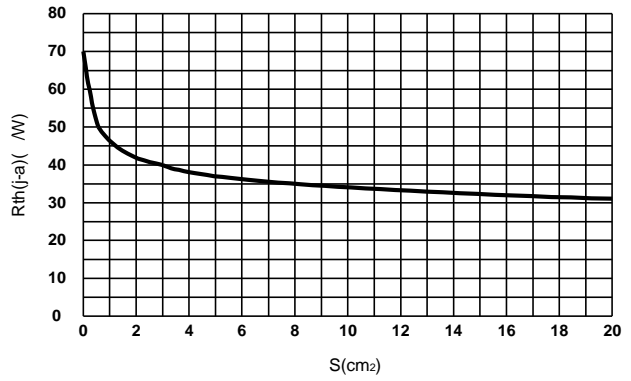


Figure 8. Thermal resistance junction to ambient versus copper surface under tab (Epoxy printed circuit board, copper thickness : 35µ m) (STPS10150CG only)