

Features

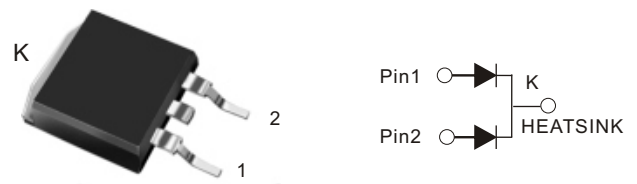
- Trench MOS schottky technology
- Low stored charge Majority Carrier Conduction
- Low forward voltage drop
- Low leakage current
- Low power loss and high efficiency
- High surge capacity

Applications

- Schottky rectifier design for high frequency switched mode power supplies, such as adaptators and on board DC/DC converters.

Product Summary

Symbol	Value
V_{RRM}	100V
$I_F(AV)$	2x15A
$V_{Ftyp}(I_F=15A, T_j=25^\circ C)$	0.68V
I_{FSM} /Per Leg surge current 8.3ms single half	175A



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Major Ratings and Electrical Characteristics.

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

Maximum average forward rectified current	$I_{(AV)}$	30.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM} /Per Leg	175.0	Amps
Maximum instantaneous forward voltage at 15 A	V_F	0.72	Volts
Maximum instantaneous reverse current at rated DC blocking voltage	I_R	30	mA
Typical thermal resistance	$R_{\theta JC}$	3.0	°C/W
Operating junction temperature range	T_J	-65 to +150	°C
Storage temperature range	T_{STG}	-65 to +150	°C

Parameter	Symbol	Value			Unit	Test Condition
		min.	typ.	max.		
Breakdown voltage	V_{BR}	102	-	-	V	$T_j=25^\circ\text{C}$, $I_R=100\mu\text{A}$
Forward Voltage drop	$V_F^{(1)}$	-	0.41	-		$T_j=25^\circ\text{C}$, $I_F=2\text{A}$
		-	0.48	0.52		$T_j=25^\circ\text{C}$, $I_F=5\text{A}$
		-	0.68	0.72		$T_j=25^\circ\text{C}$, $I_F=15\text{A}$
		-	0.6	-		$T_j=125^\circ\text{C}$, $I_F=15\text{A}$
Reverse leakage current	$I_R^{(2)}$	-	-	50	μA	$T_j=25^\circ\text{C}$, $V_R=100\text{V}$
		-	8.2	30	mA	$T_j=125^\circ\text{C}$, $V_R=100\text{V}$

Notes

- (1) Pulse test: 300us pulse width, 2% duty cycle
- (2) Pulse test: 300us pulse width, 2% duty cycle

Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

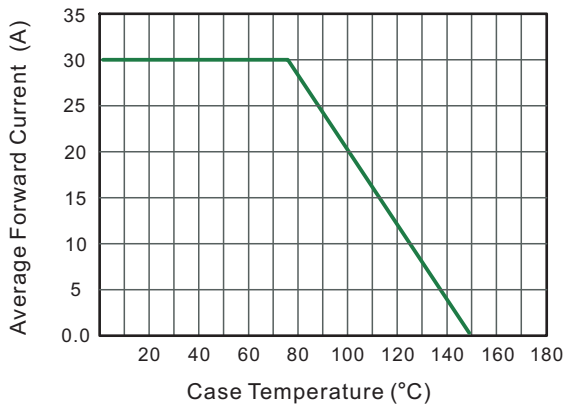


Fig.2 Typical Reverse Characteristics

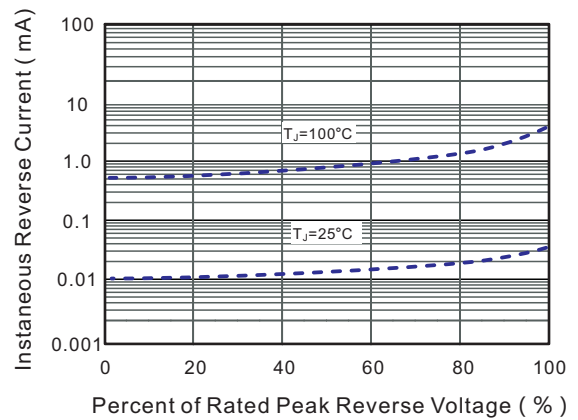


Fig.3 Typical Forward Characteristic

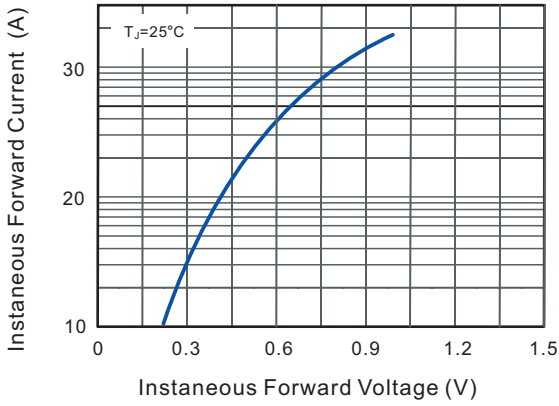


Fig.4 Typical Junction Capacitance

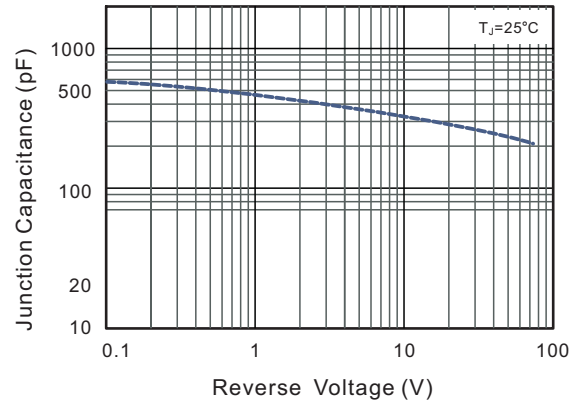


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

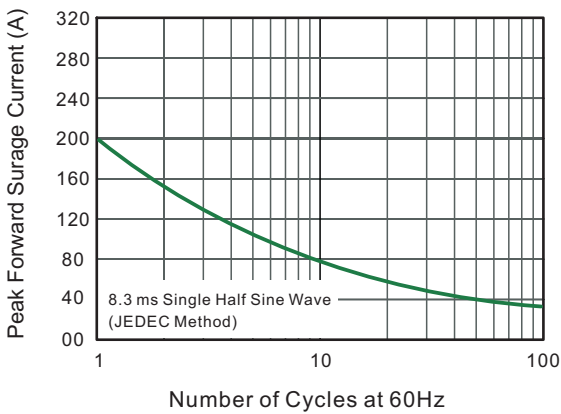
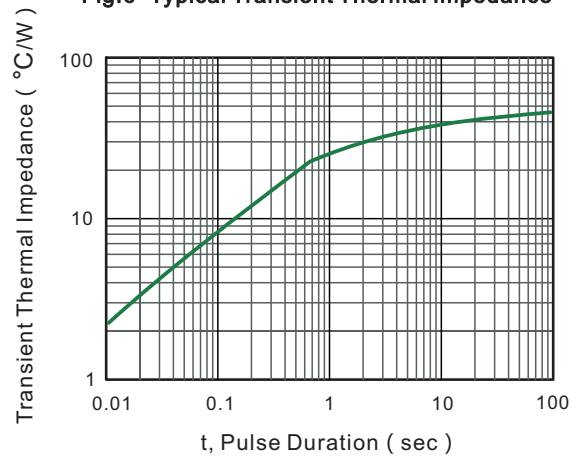


Fig.6 Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

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