International
IOR Rectifier
AN INFINEON TECHNOLOGIES COMPANY

PD-94233B

SCHOTTKY RECTIFIER
HIGH EFFICIENCY SERIES

35GQ150
35 Amp, 150V

Major Ratings and Characteristics

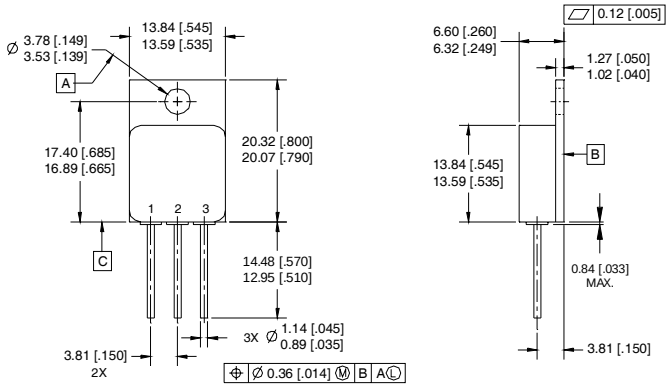
Characteristics	35GQ150	Units
$I_{F(AV)}$	35	A
V_{RRM}	150	V
I_{FSM} @ tp = 8.3ms half-sine	400	A
V_F @ 35Apk, T_J =125°C	0.9	V
T_J, T_{stg} Operating and storage	-55 to 150	°C

Description/Features

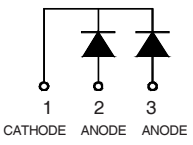
The 35GQ150 Schottky rectifier has been expressly designed to meet the rigorous requirements of HiRel environments. It is packaged in the hermeticly isolated TO-254AA package. The device's forward voltage drop and reverse leakage current are optimized for the lowest power loss and the highest circuit efficiency for typical high frequency switching power supplies and resonent power converters. Full MIL-PRF-19500 quality conformance testing is available on source control drawings to TX, TXV and S quality levels.

- Hermetically Sealed
- Low Forward Voltage Drop
- High Frequency Operation
- Guard Ring for Enhanced Ruggedness and Long term Reliability
- Lightweight
- ESD Rating: Class NS per MIL-STD-750, Method 1020

CASE STYLE



NOTES:
1. DIMENSIONING & TOLERANCING PER ASME Y14.5M-1994.
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
3. CONTROLLING DIMENSION: INCH.
4. CONFORMS TO JEDEC OUTLINE TO-254AA.
5. EXTERNALLY SHORT PINS 2 & 3



Case Outline and Dimensions - TO-254AA

Voltage Ratings

Part number		35GQ150
V_R	Max. DC Reverse Voltage (V)	150
V_{RWM}	Max. Working Peak Reverse Voltage (V)	

Absolute Maximum Ratings

	Parameters	Limits	Units	Conditions
$I_{F(AV)}$	Max. Average Forward Current See Fig. 5	35	A	50% duty cycle @ T_C = 100 °C, square waveform
I_{FSM}	Max. Peak One Cycle Non - Repetitive Surge Current	400	A	@ t_p = 8.3 ms half-sine

Electrical Specifications

	Parameters	Limits	Units	Conditions	
V_{FM}	Max. Forward Voltage Drop See Fig. 1①	1.12	V	@35A	T_J = -55°C ②
		1.41	V	@70A	
		1.0	V	@35A	T_J = 25°C ②
		1.31	V	@70A	
		0.9	V	@35A	T_J = 125°C ②
		1.26	V	@70A	
I_{RM}	Max. Reverse Leakage Current See Fig. 2 ①	0.2	mA	T_J = 25°C	V_R = rated V_R ②
		32	mA	T_J = 125°C	
C_T	Max. Junction Capacitance	1600	pF	V_R = 5V_{DC} (1MHz, 25°C)	
L_S	Typical Series Inductance	7.8	nH	Measured from center of cathode pad to center of anode pad	

Thermal-Mechanical Specifications

	Parameters	Limits	Units	Conditions
T_J	Max. Junction Temperature Range	-55 to 150	°C	
T_{stg}	Max. Storage Temperature Range	-55 to 150	°C	
R_{thJC}	Max. Thermal Resistance, Junction to Case	1.1	°C/W	DC operation See Fig. 4
wt	Weight (Typical)	9.3	g	
	Die Size (Typical)	(2)158X158	mils	
	Case Style	TO-254AA		

① Pulse Width < 300µs, Duty Cycle < 2%
② Pins 2 and 3 externally tied together

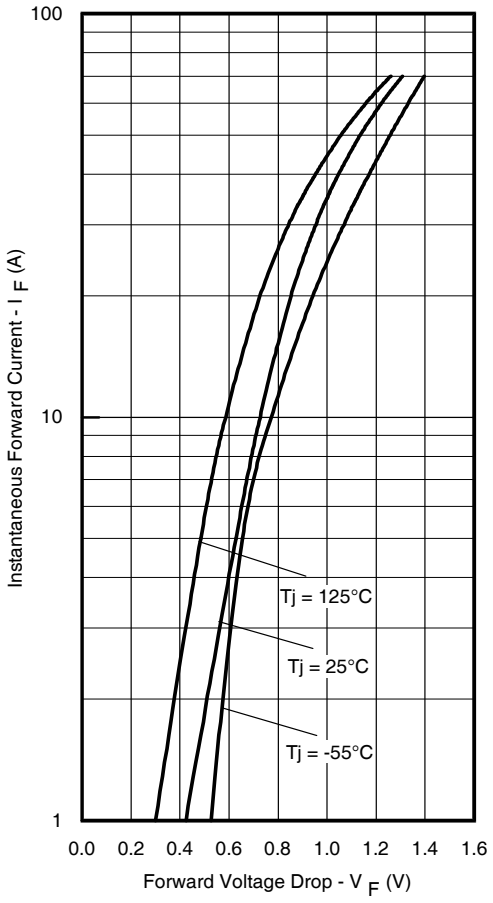


Fig. 1 - Max. Forward Voltage Drop Characteristics

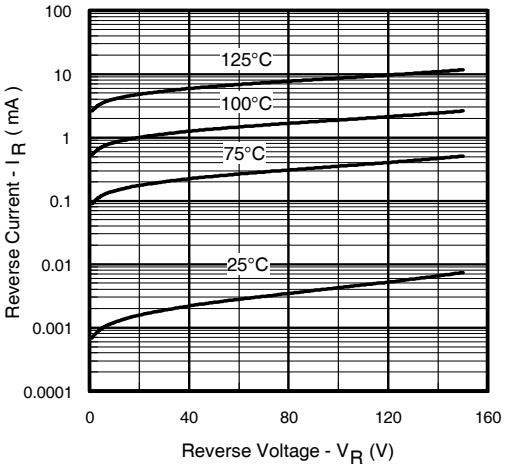


Fig. 2 - Typical Values of Reverse Current Vs. Reverse Voltage

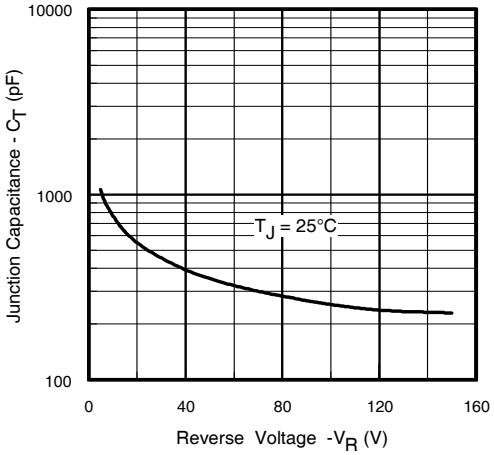


Fig. 3 - Typical Junction Capacitance Vs. Reverse Voltage

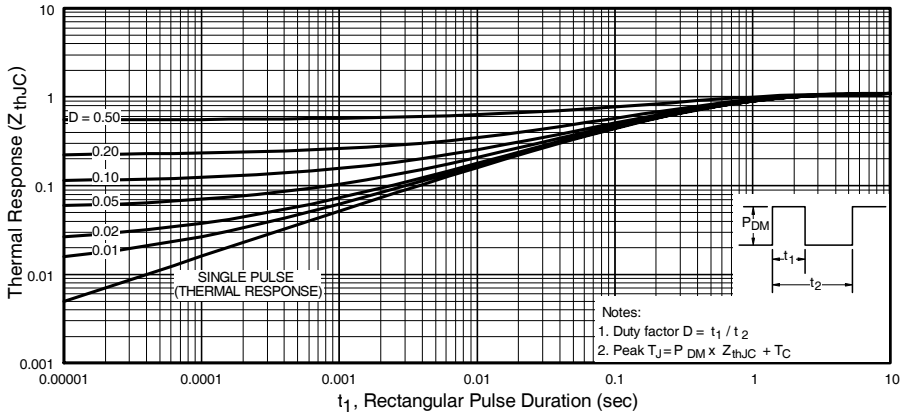


Fig. 4 - Max. Thermal Impedance Z_{thJC} Characteristics

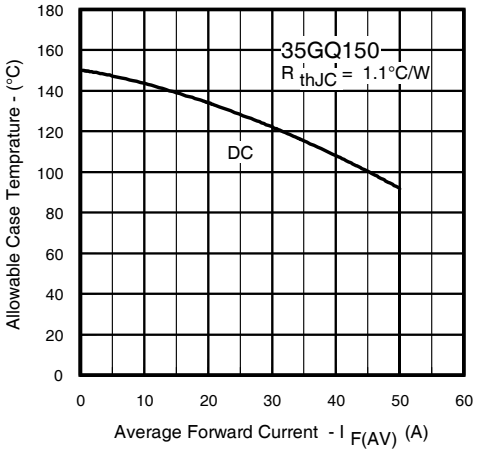


Fig. 5 - Max. Allowable Case Temperature Vs.
Average Forward Current

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Data and specifications subject to change without notice. 10/2015

单击下面可查看定价，库存，交付和生命周期等信息

>>Infineon Technologies(英飞凌)