LOW LOSS SUPER HIGH SPEED RECTIFIER D92-02

Features
◆ Ultrafast 35 Nanosecond Recovery Time
◆ 175° C Operating Junction Temperature
◆ Popular TO-247 Package
◆ Low VF
◆ High Temperature Glass Passivated Junction
◆ Low Forward Voltage
◆ Low Leakage Current
◆ Reverse Voltage to 200 Volts
◆ Pb-Free Packages are Available

Typical Reference Data

VRRM= 200V
IF(AV)= 20A

APPLICATIONS
● High speed power switching
● Plating Power Supply
● Converter & Chopper
● Inversion Welder
● PFC
● Ultrasonic Cleaner and Welder

MAXIMUM RATINGS

Rating	Symbol	D92-02	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	200	V
Average Rectified Forward Current Total Device, (Rated VR), TC = 110℃	IF(AV)	10 20	A
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions halfwave , single phase, 50 Hz)	IFSM	100	A
Operating Junction Temperature and Storage Temperature	TJ, Tstg	-40 to +150	℃

THERMAL CHARACTERISTICS (Per Diode Leg)

Maximum Thermal Resistance, Junction to Case	RθJC	1.5	℃/W

ELECTRICAL CHARACTERISTICS(Per Diode Leg)

Maximum Instantaneous Forward Voltage (1) (IF = 10 Amps, TC = 25° C)	VF	0.94			V
Maximum Instantaneous Reverse Current (1)	IR	800	800	800	μA
(Rated dc Voltage, TJ = 150° C) (Rated dc Voltage, TJ = 25° C)		10	10	10	
Maximum Reverse Recovery Time (IF = 0.5 A, IR = 1.0 A, IREC = 0.25 A)	Trr	35			ns

(1) Pulse Test: Pulse Width = 300μs, Duty Cycle≤2.0%.

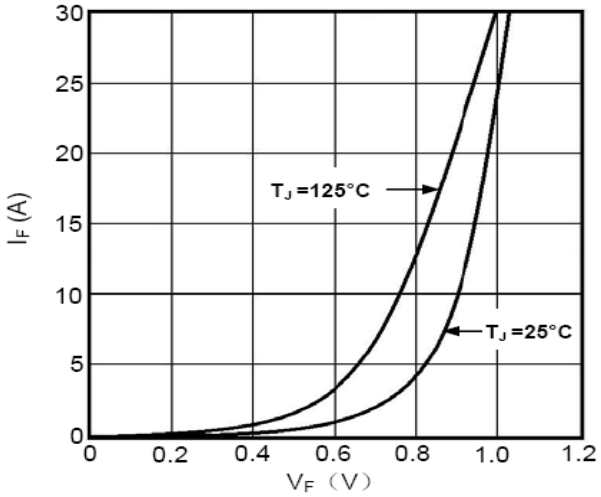


Fig1. Forward Voltage Drop vs Forward Current

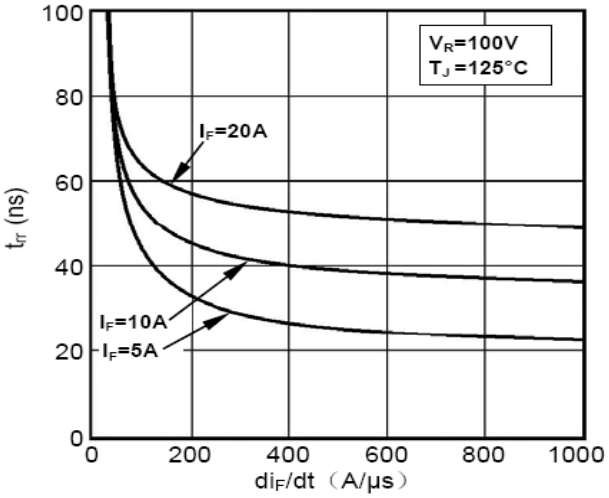


Fig2. Reverse Recovery Time vs di$_F$/dt

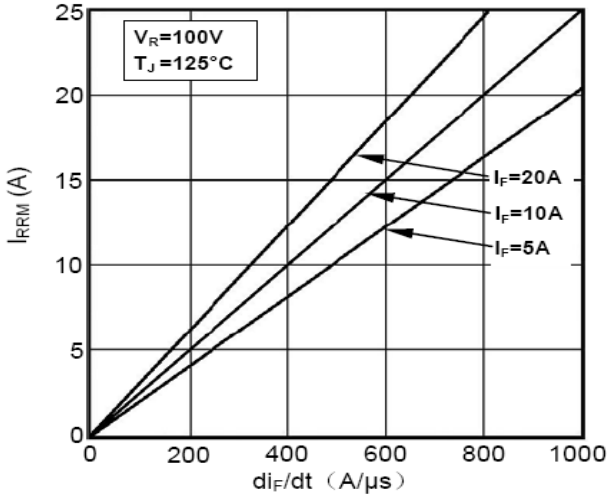


Fig3. Reverse Recovery Current vs di$_F$/dt

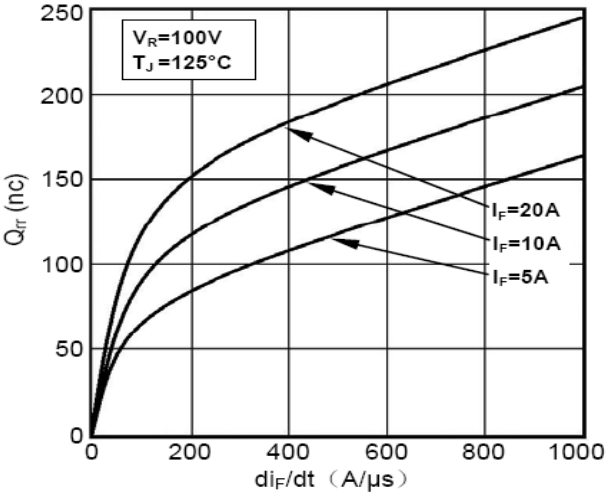


Fig4. Reverse Recovery Charge vs di$_F$/dt

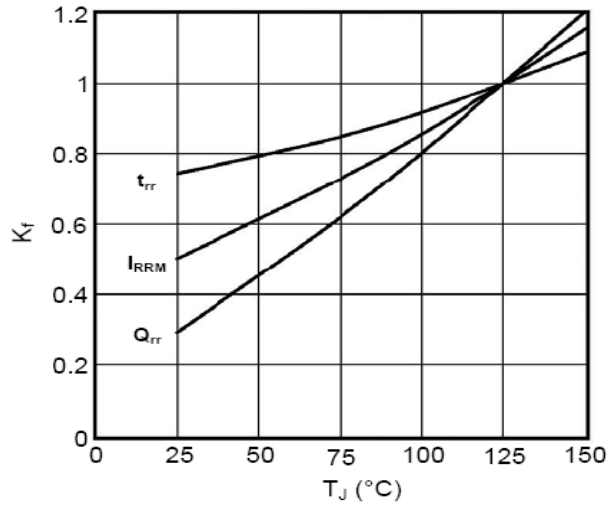


Fig5. Dynamic Parameters vs Junction Temperature

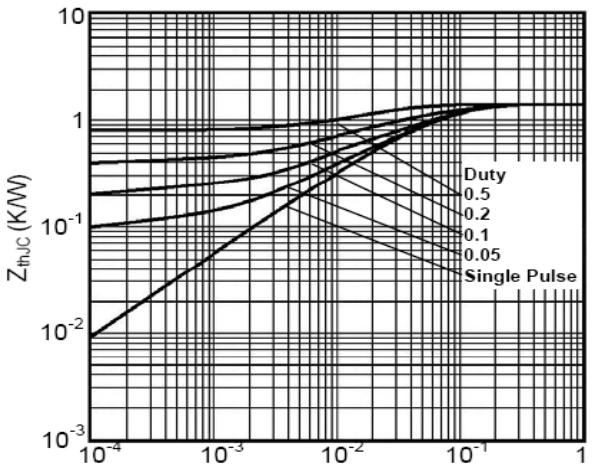
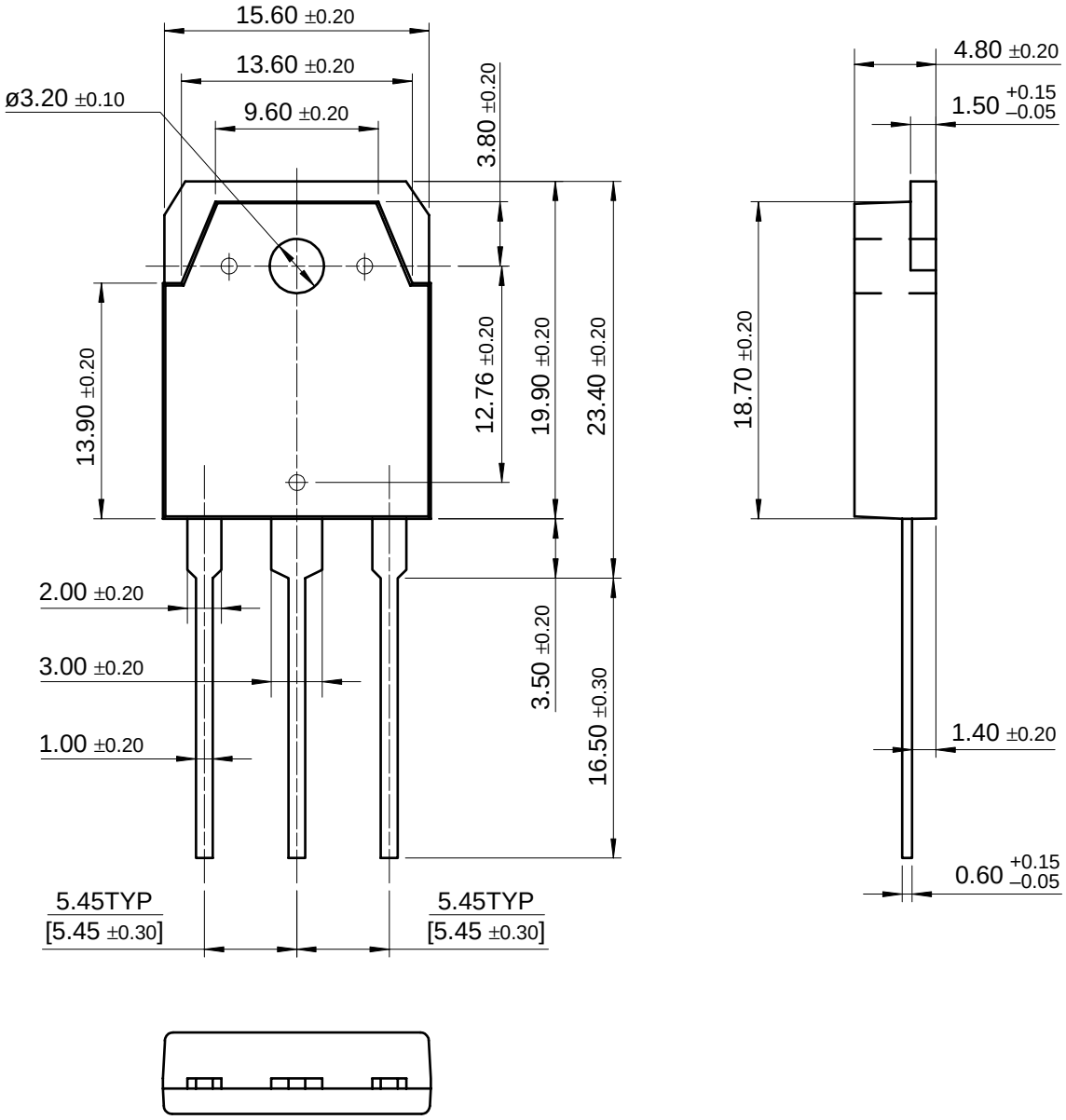


Fig6. Transient Thermal Impedance

TO-3P/247



注意事项：

1. XXXX代表日期码，第一码表示公元年的最后一码，第二码表示生产时当月码（A,B,C…为一月，二月，三月…),第三，四码表示大量生产时批次码。
   例如:2009年第一月生产的，D/C为9AXX。
2. 包装及出货:ROHS,30PCS/管,0.6K/BOX,1.8K(1.8K BOXEX)/CARTON, BOXEX及CARTON。

D92-02

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修订内容