JINGBAIYUAN

JTF200KD12

JBY High Power Products

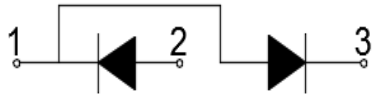
Super Fast Recovery Diode ,200A

Features

- International standard package with DCB ceramic base plate
- Dual Diode construction
- Low Leakage Current
- Low forward voltage drop
- High surge current capability
- Super Fast Switching

Typical Applications

- Antiparallel diode for high frequency switching devices
- Free wheeling diode in converters and motor control circuits
- Inductive heating and melting
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners and welders



Maximum Ratings				
Parameter	**Symbol**	**Test Conditions**	**Values**	**Unit**
Repetitive peak reverse voltage	V_{RRM}		1200	V
RMS reverse voltage	V_{RMS}		840	V
DC blocking voltage	V_{DC}		1200	V
Average forward current	$I_{F(AV)}$	TC=85℃	200	A
Non-repertitive forward surge current,half sine-wave	I_{FSM}	TC=25℃	2800	A

Electrical Specifications				
Parameter	**Symbol**	**Test Conditions**	**Values**	**Unit**
DC forward voltage	V_F	I_F=200A T_J=25℃	2.35	V
Maximum DC reverse current	I_R	V_R=Rated V_{RRM} T_J=25℃	50	uA
		V_R=Rated V_{RRM} T_J=125℃	1	mA
Maximum Reverse Recovery Time	trr	V_{DD}=100V, I_F=45A, dif/dt=300A/us; T_J=25℃	150	ns
Reverse recovery charge(Area Under the curve Defined by IRRM And trr)	Qrr		--	nc

Diode Peak Reverse Recovery Current	I_{RRM}		11	A

Thermal - Mechanical Specifications				
Parameter	**Symbol**	**Test Conditions**	**Values**	**Unit**
Thermal resistance junction to case	R_{thjc}		0.25	˚C/W
Junction and storage temperature range	T_J, T_{stg}		-40 to 150	˚C
Mounting Torque	Mt	To terminals(M6)	5±15%	Nm
	Ms	To heatsink(M6)	5±15%	
Module(Approximately)	Weight		160	g
Maximum RMS insulation voltage (for insulated type)	Visol	Ac.50H_Z；R.M.S；1min	2500	V
		Ac.50H_Z；R.M.S；1sec	3500	

Performance Curves

Figure .1- Typical Forward Characteristics

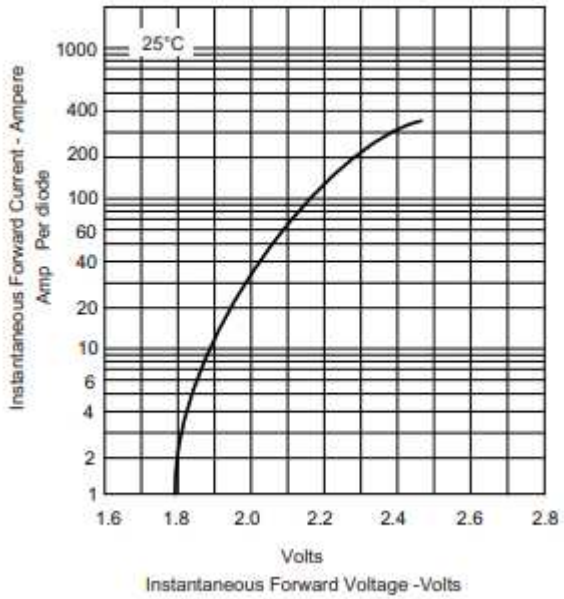


Figure .2-Forward Derating Curve

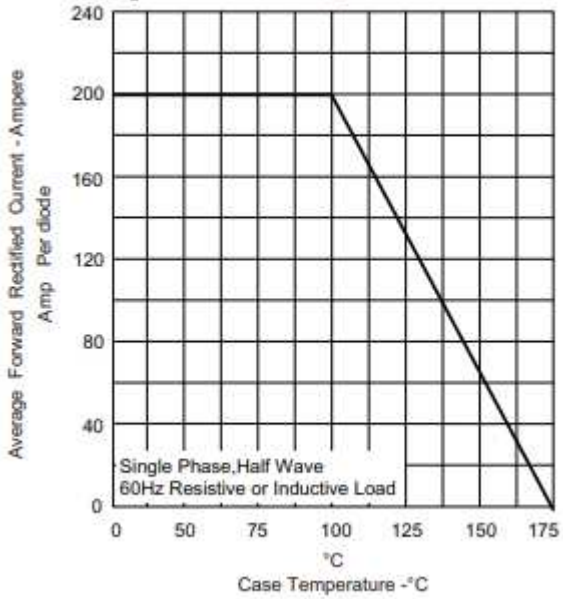


Figure .3-Peak Forward Surge Current

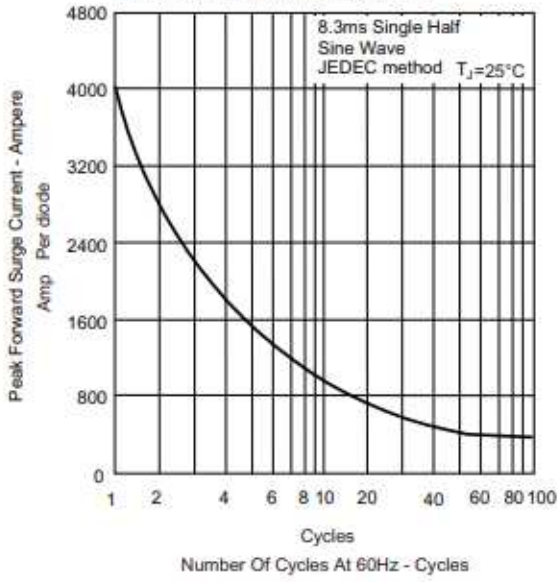
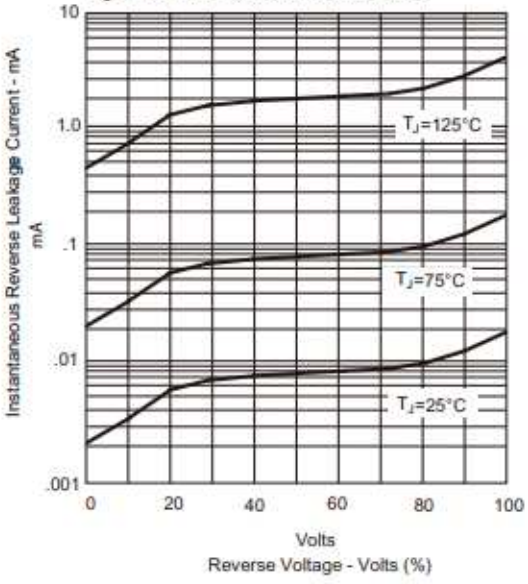
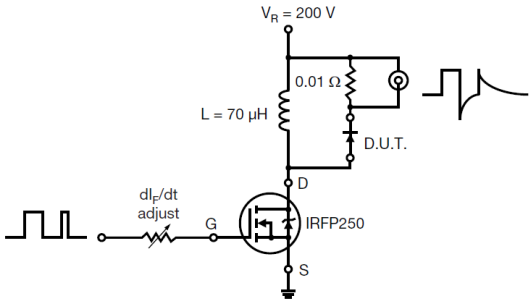


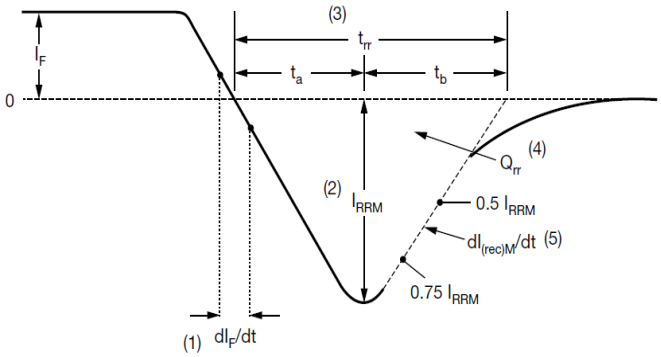
Figure .4-Typical Reverse Characteristics



Reverse Recovery Parameter Test Circuit



Reverse Recovery Waveform and Definitions



(1) dI_F/dt - rate of change of current through zero crossing

(2) I_{RRM} - peak reverse recovery current

(3) t_{rr} - reverse recovery time measured from zero crossing point of negative going I_F to point where a line passing through 0.75 I_{RRM} and 0.50 I_{RRM} extrapolated to zero current.

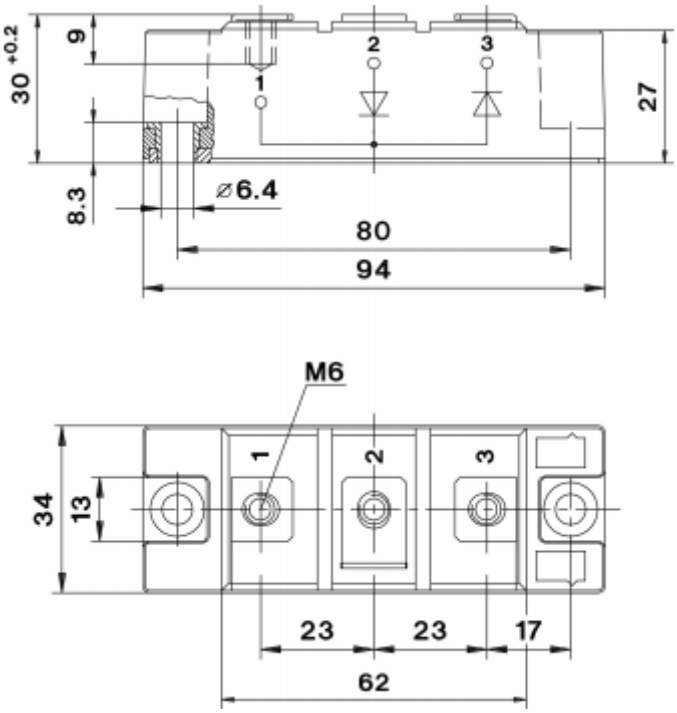
(4) Q_{rr} - area under curve defined by t_{rr} and I_{RRM}

$$Q_{rr} = \frac{t_{rr} \times I_{RRM}}{2}$$

(5) $dI_{(rec)M}/dt$ - peak rate of change of current during t_b portion of t_{rr}

Package Outline Information

T2B Package



Dimensions in mm