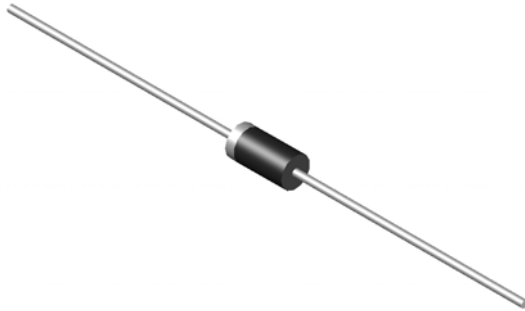


Super Fast Recovery Rectifier

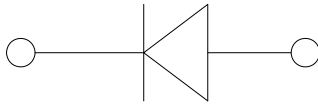


Features

- Ultrafast reverse recovery time
- Low leakage current
- Low switching losses, high efficiency
- High forward surge capability
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

For use in high frequency rectification and freewheeling application in switching mode converters and inverters for consumer, computer and telecommunication.



Mechanical Data

- **Package:** DO-204AC(DO-15)
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes the cathode end

■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MURA260
Device marking code			MURA260
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	600
Maximum RMS Voltage	V_{RMS}	V	420
Maximum DC blocking Voltage	V_{DC}	V	600
Average Forward Current @60Hz sine wave, Resistance load, Ta =75°C	$I_{F(AV)}$	A	2.0
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Tj=25°C	I_{FSM}	A	60
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			120
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I^2t	A ² s	15
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C_j	pF	15
Storage Temperature	T_{stg}	°C	-55 ~ +150
Junction Temperature	T_j	°C	-55 ~ +150



MURA260

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MURA260
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =2.0A	1.28
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	2.5
			T _j =125°C	100
Maximum reverse recovery time	t _{rr}	ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	50

■Dynamic Characteristics

◆ MURA260

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS		Min	Typ	Max
Reverse Recovery Time	T _{RR}	ns	T _j =25°C	I _F =1A, di/dt=-50A/us V _{RM} =30V	-	50	-
			T _j =25°C	I _F =2A di/dt=-200A/us V _{RM} =400V	-	43	-
			T _j =125°C		-	66	-
Peak recovery current	I _{RRM}	A	T _j =25°C		-	5.0	-
			T _j =125°C		-	7.4	-
Reverse recovery charge	Q _{rr}	nC	T _j =25°C		-	105.9	-
			T _j =125°C		-	243.8	-
Non-repetitive avalanche energy	E _{AS}	mJ	T _j =25°C	I _R =1.9A, L=15 mH	27	-	-

■Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MURA260
Typical Thermal Resistance	R _{θJA}	°C/W	50

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MURA260	D1	Approximate 0.38	3000	3000	30000	Tape
MURA260	C1	Approximate 0.38	500	500	25000	Bulk



■ Characteristics(Typical)

FIG.1: I_o - T_a Curve

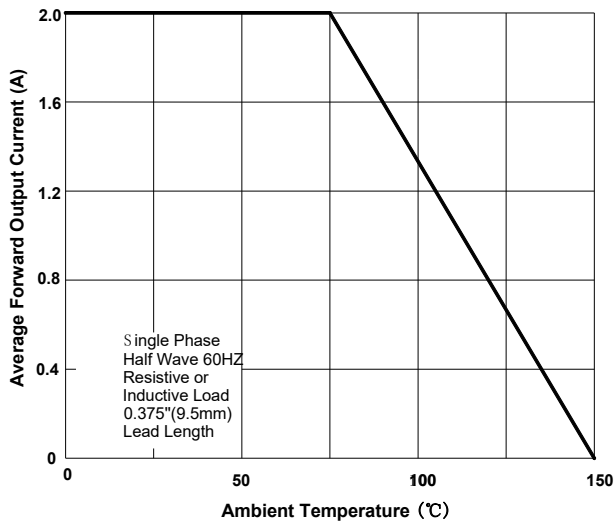


FIG.2: Forward Surge Current Capability

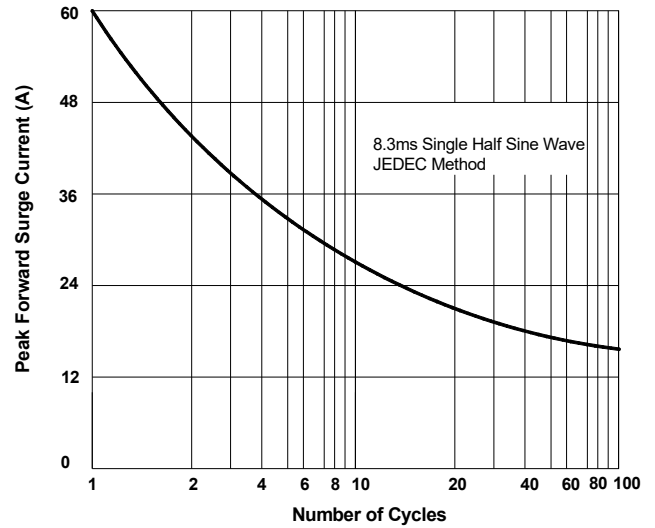


FIG.3: Typical Forward Voltage

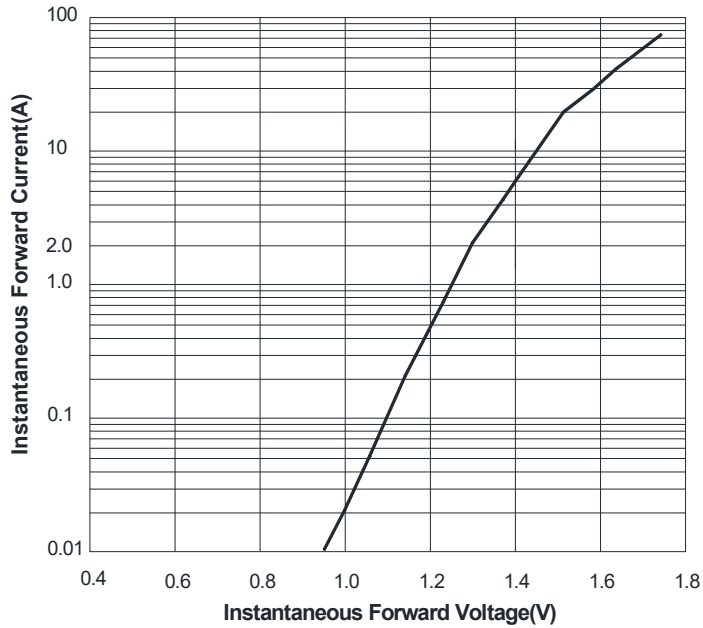


FIG.4: Typical Reverse Characteristics

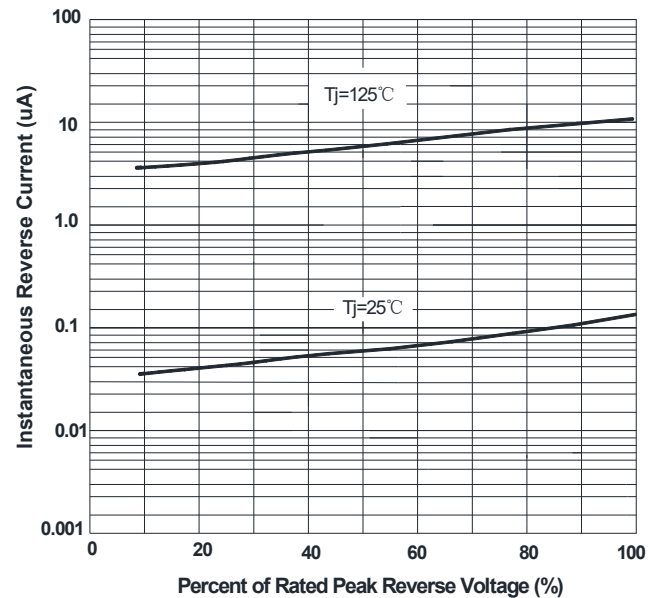
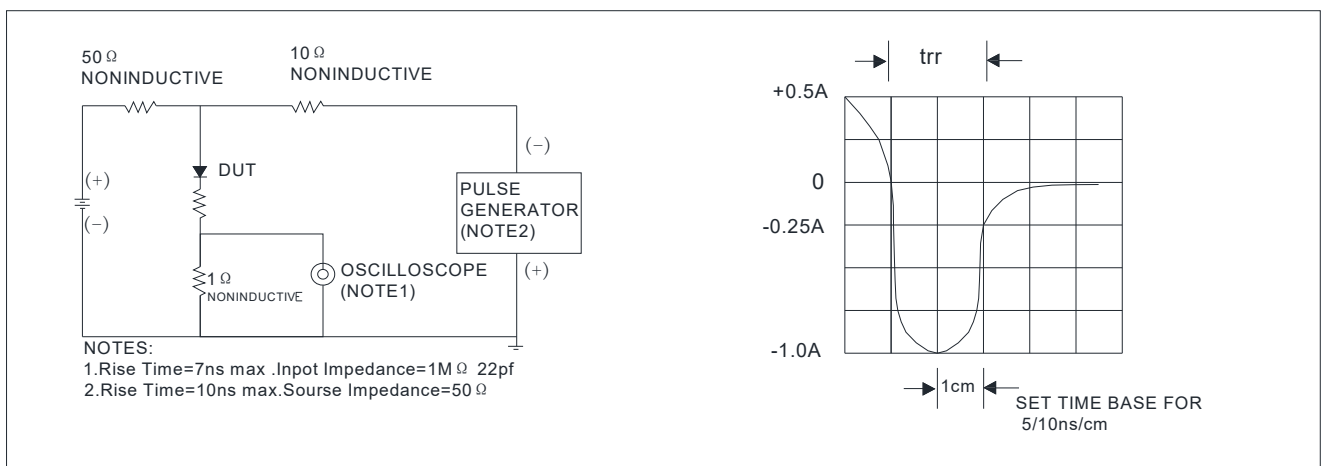
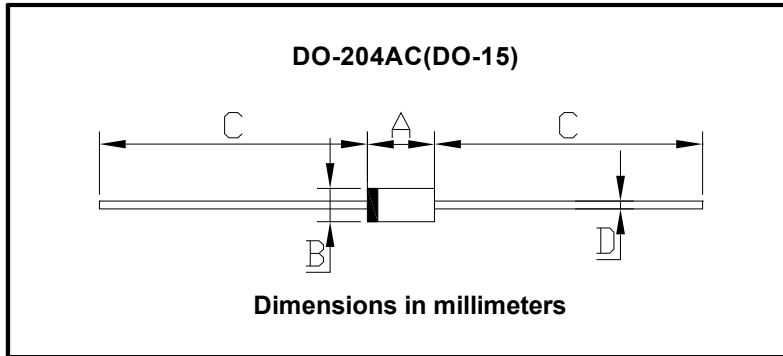


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





■ Outline Dimensions



DO-204AC(DO-15)		
Dim	Min	Max
A	5.80	7.60
B	2.60	3.60
C	25.4	/
D	0.70	0.90



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