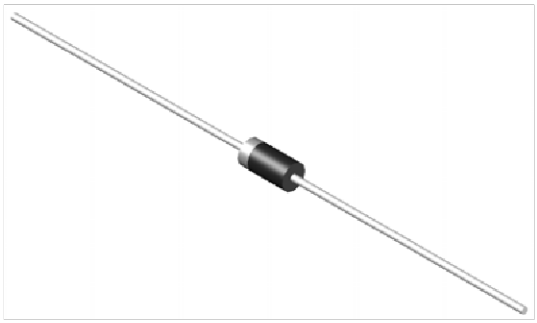
Super Fast Recovery Rectifier



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-204AL(DO-41)
  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 (T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	MUR120	MUR140	MUR160
Device marking code			MUR120	MUR140	MUR160
Repetitive Peak Reverse Voltage	V_{RRM}	V	200	400	600
Average Forward Current @60Hz sine wave, Resistance load, Ta =75℃	$I_{F(AV)}$	A	1.0		
Surge(Non-repetitive)Forward Current @ 60Hz Half-sine wave,1 cycle, Ta=25℃	I_{FSM}	A	35		
Storage Temperature	T_{stg}	℃	-55 ~+150		
Junction Temperature	T_j	℃	-55~+150		

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MUR120	MUR140	MUR160
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=1.0A	0.875	1.25	
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	T_a=25℃	5		
			T_a=125℃	150		
Reverse Recovery time	t_{rr}	ns	I_F=0.5A I_R=1A I_{RR}=0.25A	25	50	
Typical junction capacitance	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	40		

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	MUR120	MUR140	MUR160
Thermal Resistance	$R_{\theta J-A}$	℃/W	60		

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR120~MUR160	D1	Approximate 0.30	5000	5000	50000	Tape
MUR120~MUR160	C1	Approximate 0.30	1000	1000	50000	Bulk

■ Characteristics(Typical)

FIG.1: Io-Ta Curve

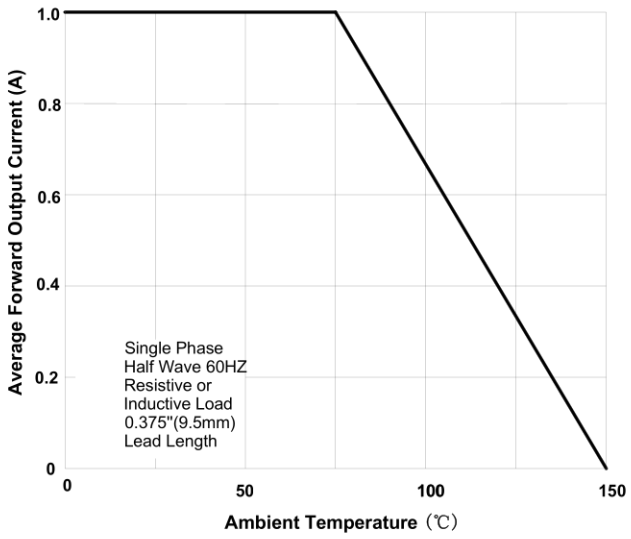


FIG.2: Surge Forward Currrent Capability

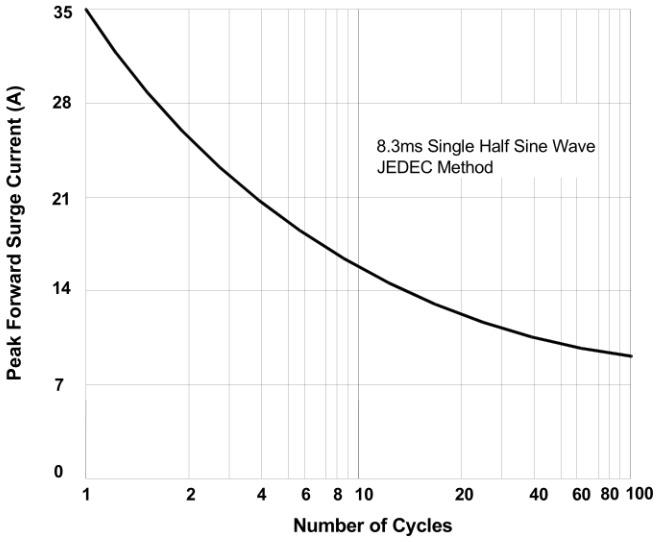


FIG.3: Forward Voltage

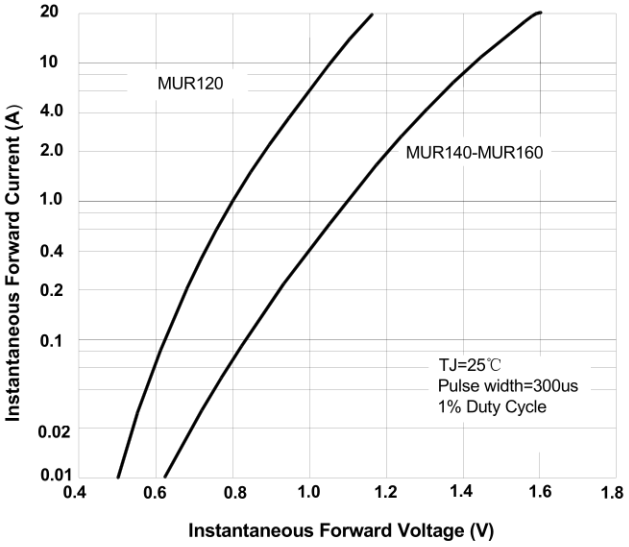


FIG.4: Typical Reverse Characteristics

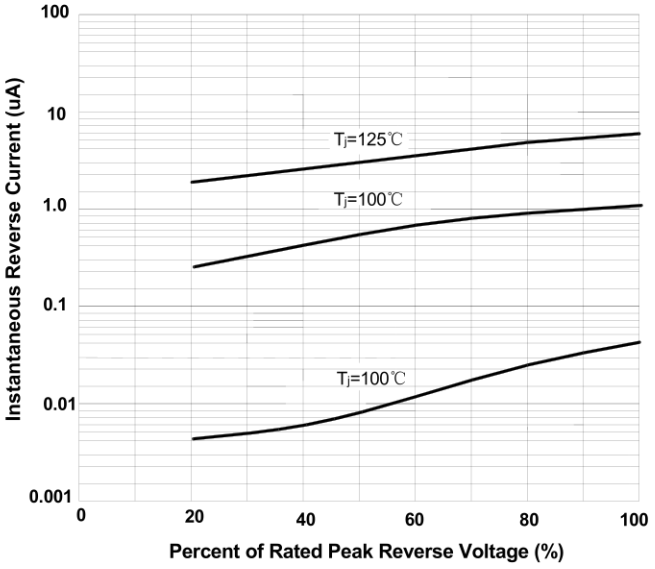
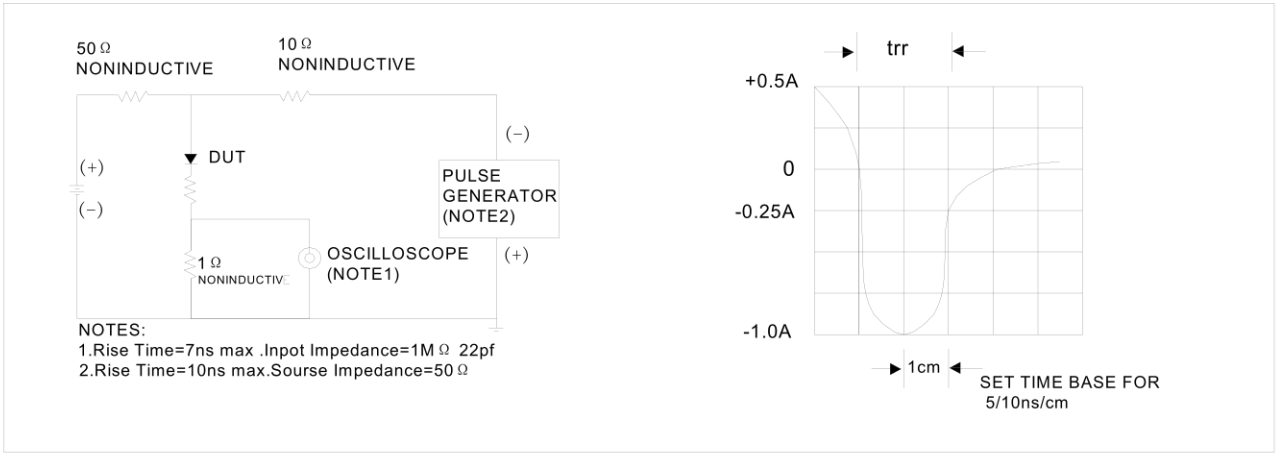
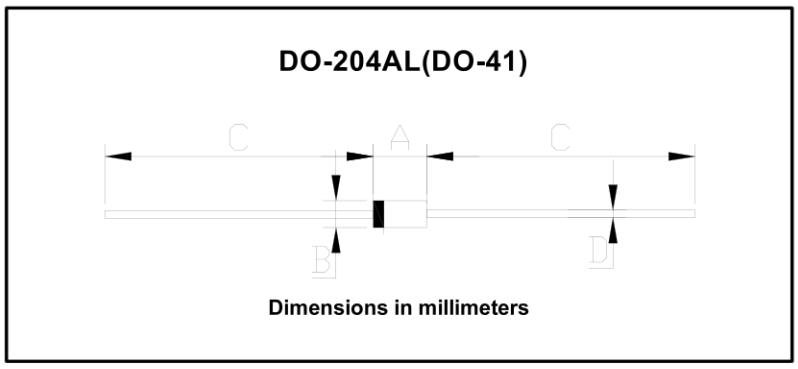


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ Outline Dimensions



DO-204AL(DO-41)		
Dim	Min	Max
A	4.22	5.21
B	2.03	2.72
C	25.4	/
D	0.69	0.86

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