MUR120 Thru MUR1100E

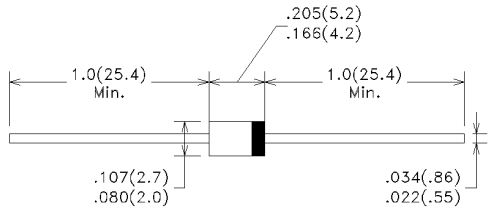
Axial High Efficient Rectifiers

Reverse Voltage - 200 ~ 1000 V

Forward Current - 1.0 A

Package Outline Dimensions in mm (inches)

DO-41





Features

- High reliability
- Low forward voltage drop
- Ultrafast Recovery times for high efficiency
- Low leakage current
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

Typical Applications

- For use in switching power Supplies.

Mechanical Data

- Case:DO-41 Plastic Package
- Polarity:Color band denotes cathode end

Maximum ratings

Ratings at TA=25℃ (unless otherwise specified)

Parameter	Symbol	MUR 120	MUR 130	MUR 140	MUR 160	MUR 180	MUR 1100E	Unit
Maximum recurrent peak reverse voltage	VRRM	200	300	400	600	800	1000	V
Maximum RMS voltage	VRMS	140	210	280	420	560	700	V
Maximum DC blocking voltage	VDC	200	300	400	600	800	1000	V
Maximum average forward rectified current	IF(AV)	1.0						A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30						A
Storage temperature range	TS	-55 ~ 150						°C
Operating Junction temperature range	Tj	-55 ~ 150						°C
Thermal Resistance	RthJA	65						°C /W

Electrical characteristics

Ratings at TA=25℃ (unless otherwise specified)

Parameter	Test Conditions	Symbol	MUR120	MUR130 thur MUR160	MUR180 thur MUR1100E	Unit
Maximum forward voltage	IF=1.0 A	VF	1.0	1.3	1.7	V
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	5.0			μA
	TA=125°C		100			
Maximum Reverse Recovery Time	RG1	Trr	50		75	ns

Characteristics Curves

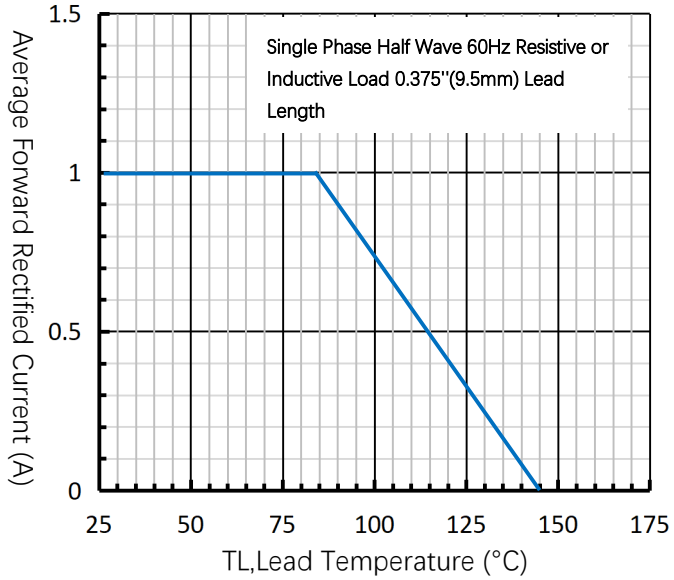


Fig.1 Forward Current Derating Curve

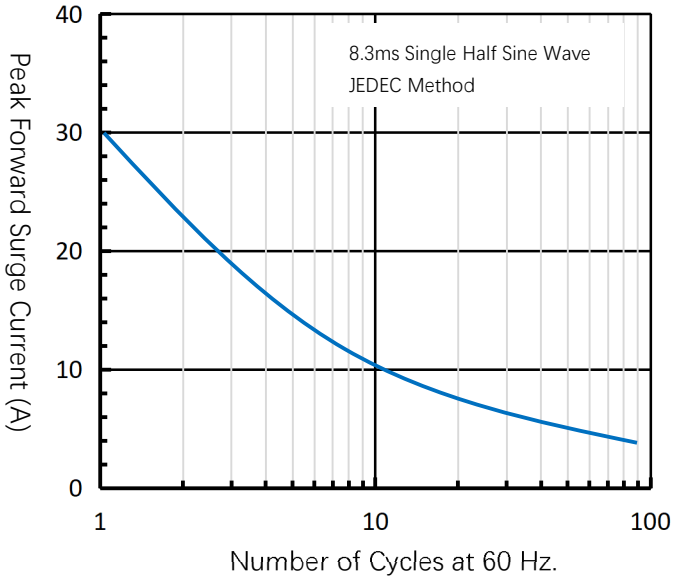


Fig.2 Forward Surge Current Capability

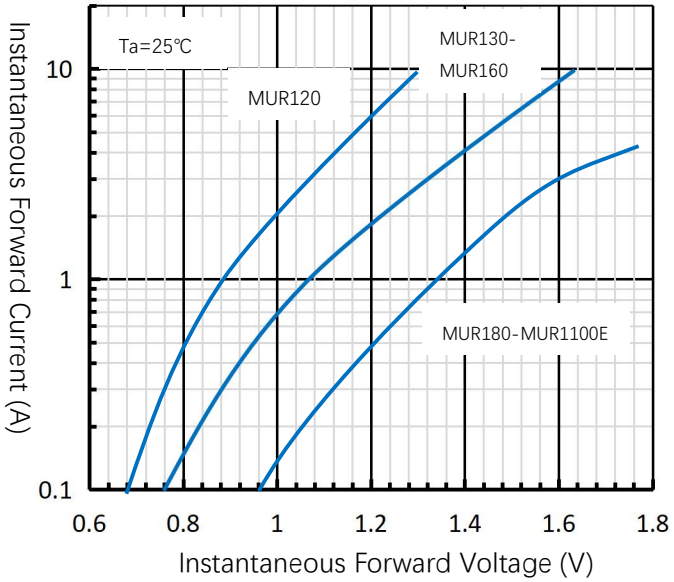


Fig. 3 Typical Forward Characteristic

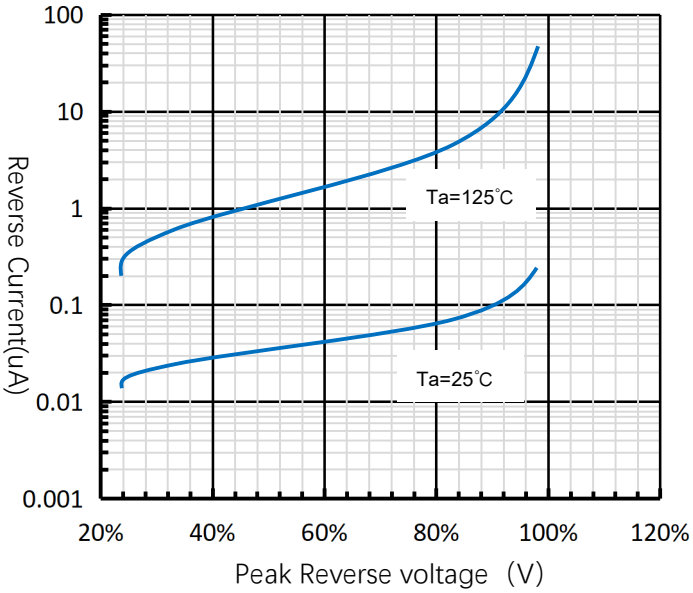


Fig. 4 Typical Reverse Characteristics