FrelTec GmbH

Mathildenstr. 10A
82319 Starnberg
Germany

Ultrafast Plastic Rectifiers
DO15

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68B		MUR160xxxx		DO15		B05
Type		Type		Package		Packing
68B: Ultrafast Plastic Rectifiers		MUR160		DO15		B05: tape in box for 5000 pc

All products according to RoHS (2015/863/EU)

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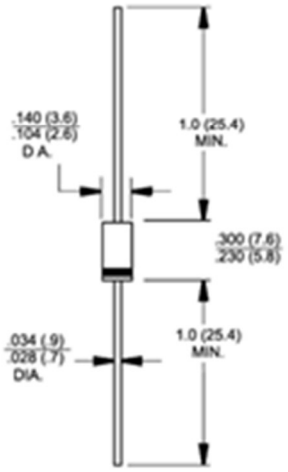
PACKAGE OUTLINE

DO-204AC (DO-15)



Dimensions in inches and (millimeters)

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MAXIMUM RATINGS

Parameter	Symbols	MUR160	Units
Maximum repetitive peak reverse voltage	V_{RRM}	600	Volts
Working peak reverse voltage	V_{RWM}	600	Volts
Maximum DC blocking voltage	V_{DC}	600	Volts
Maximum average forward rectified current at T_A =120**°C**	$I_{F(AV)}$	1,0	Amp
Peak forward surge current 8,3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35,0	Amps
Maximum instantaneous forward voltage (Note 1) at I_F =1,0A, T_J =25**°C** at I_F=1,0A, T_J =150**°C**	V_F	1,25 1,05	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1) T_J =25**°C** T_J =150**°C**	I_R	5,0 150	uA uA
Maximum reverse recovery time at I_F=0,5A, I_R =1,0A, Irr =0,25A	t_{rr}	50	nS
Maximum reverse recovery time at I_F =1,0A, di/dt=50A/us, V_R =30V, I_{RR} =10%	t_{rr}	75	nS
Maximum forward recovery time at I_F =1,0A, di/dt=100A/us, recovery to 1,0V	t_{fr}	50	nS
Typical thermal resistance junction to ambient (Note 2)	$R_{\theta JA}$	50	**°C** /W
Operating junction and storage temperature range	T_J , T_{STG}	-55 to +150	**°C**

Notes: 1, Pulse test: tp=300us, duty cycle < 2%
2, Lead length = 3/8” on P,C, Board with 1,5” x 1,5” copper surface

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RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – Forward Current Derating Curve

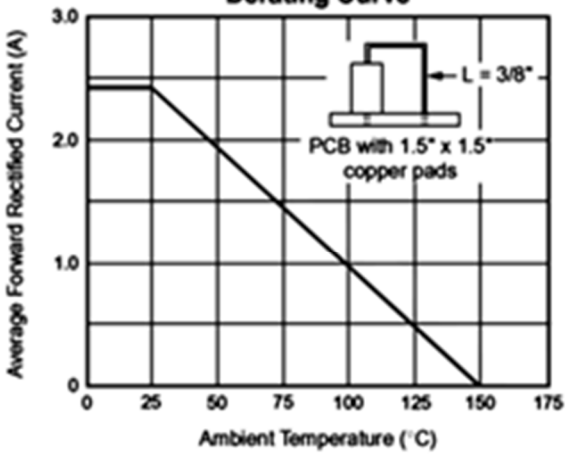


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

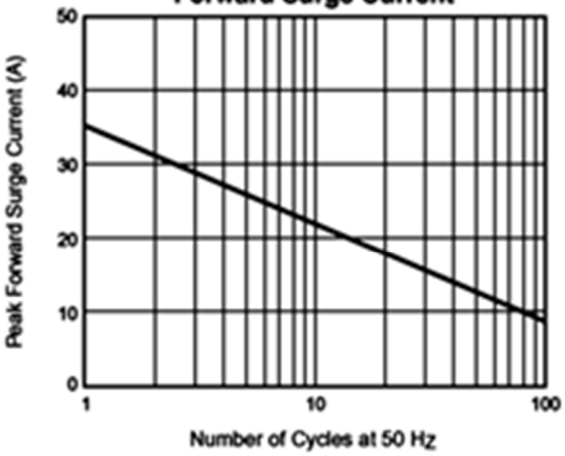


Fig. 3 – Typical Instantaneous Forward Characteristics (MUR160)

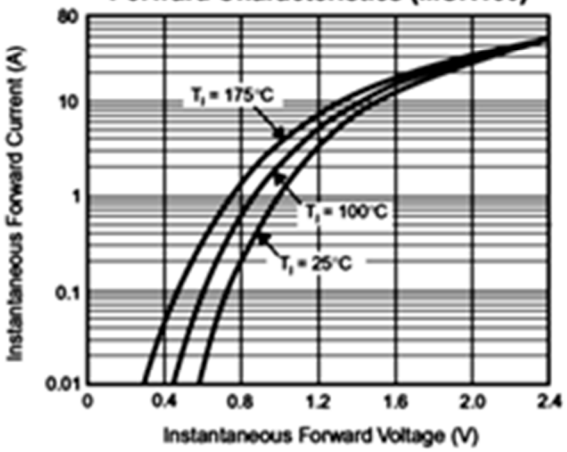


Fig. 4 – Typical Reverse Leakage Characteristics (MUR160)

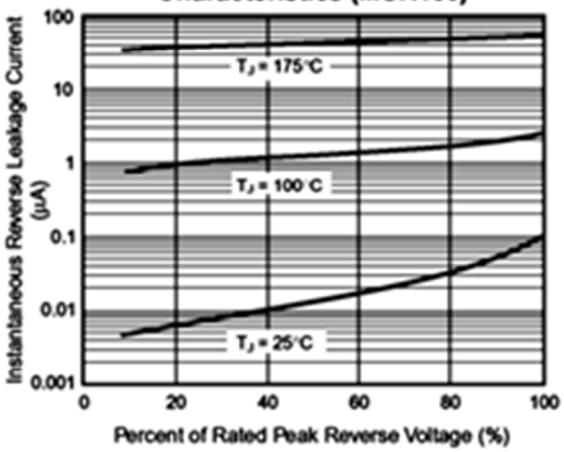
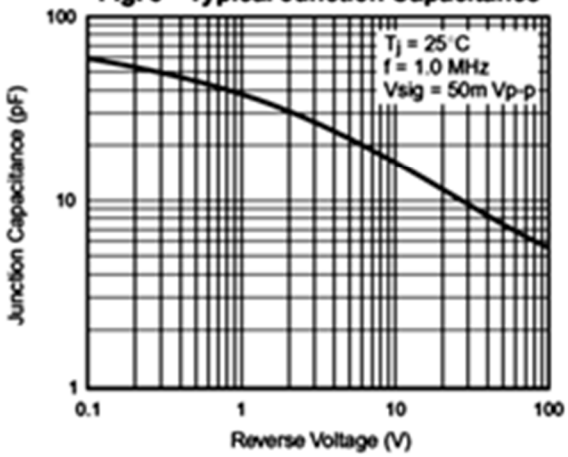


Fig. 5 – Typical Junction Capacitance



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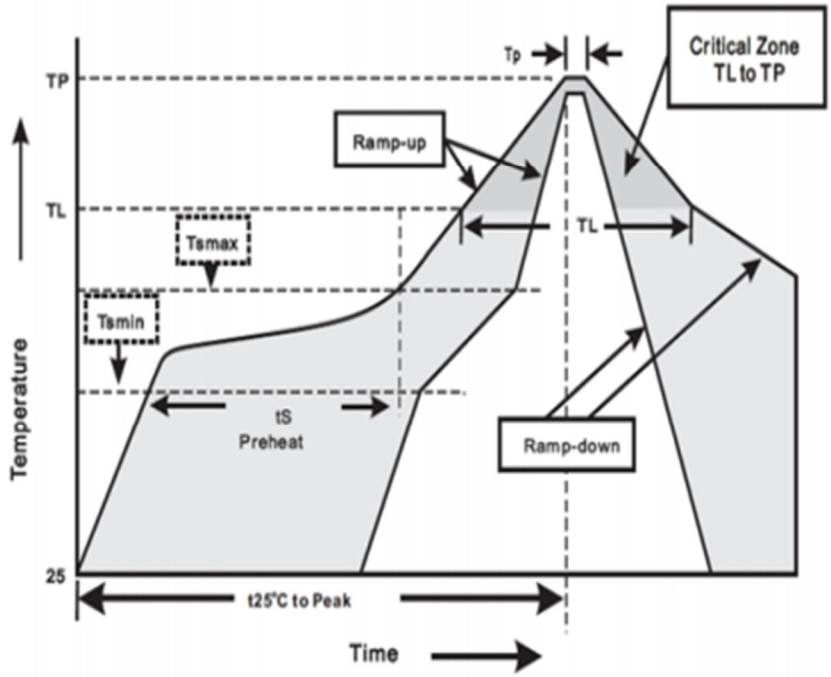
Soldering Parameters



Stock period
The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of 20-30°C and a relative humidity 20-60%RH

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