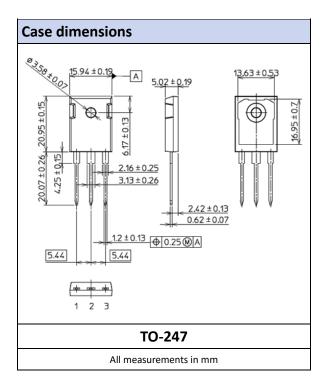


Fast Rectifier Diode

Primary characteristics				
Parameter	Value	Unit		
Peak repetitive reverse voltage	200	V		
Maximum Average Forward Rectified Current	30	А		

Features

- TO-247 case for easy automatic insertion.
- Pb-free and RoHS compliant
- Low leakage
- Low forward voltage drop
- High current capability
- Molding compound: UL Flammability Classification Rating 94V-0
- Terminals: matte tin-plated leads; solderability per MIL-STD-202, Method 208



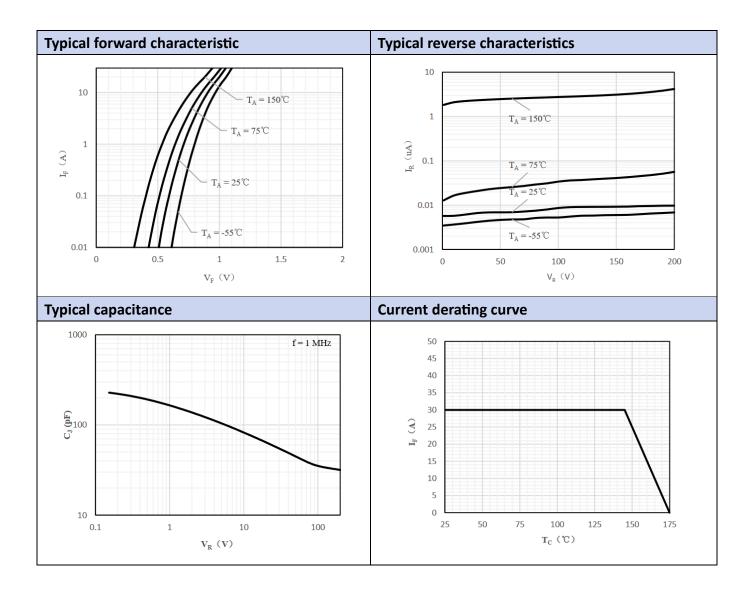
Maximum ratings (T _a = 25°C)					
Parameter	Symbol	Value	Unit		
Maximum repetitive peak reverse voltage	V_{RRM}	200			
Maximum RMS voltage	V _{RMS}	140	V		
Maximum DC blocking voltage	V _{DC}	200			
Maximum average forward rectified current	I _{F(AV)}	30			
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	200	А		
Operating junction and storage temperature range	T _j , T _{STG}	-55 ~ 175	°C		
Thermal resistance junction-to-case	R _e JC	1.5	°C/W		

Electrical characteristics (T _a = 25°C)						
Parameter	Test condition	Symbol	Value			I I mid
			Min.	Тур.	Max.	Unit
Reverse breakdown voltage	I _R =50μΑ	$V_{(BR)R}$	200	-	-	
Forward voltage	I _F =15A, T _J =25°C	V _F	1	-	0.98	V
	I _F =15A, T _J =150°C		-	-	0.85	
Maximum peak reverse current	$V_R=V_{RRM}$, $T_J=25$ °C	I _R	-	-	5.0	μΑ
	V _R =V _{RRM} , T _J =150°C		-	-	250	
Junction capacitance	V _R =0V, f=1.0MHz	- Cı	-	230	-	pF
	V _R =200V, f=1.0MHz		-	32	-	

Akyga semi Page 1/3 2023-12; REV. 1



Electrical characteristics (T _a = 25°C)						
Parameter	Test condition	Symbol	Value			
			Min.	Тур.	Max.	Unit
Davorca racavany timo	I _F =0.5A, I _{rr} =0.25A, I _R =1.0A		-	-	25	ns
Reverse recovery time	I _F =1.0A, V _R =30V	t _{rr}	-	22	-	ns
Reverse recovery charge	d _{ιF} /d _t =100A/μs	Qrr	-	19	-	nC
Peak recovery current	T _J =25°C	Irr	-	1.72	-	Α
Reverse recovery time	I _F =15A, V _R =30V	t _{rr}	-	28	-	ns
Reverse recovery charge	d _{ιF} /d _t =100A/μs	Qrr	-	26	-	nC
Peak recovery current	T _J =25°C	Irr	-	1.81	-	Α





Ordering information					
Part Number Package		Shipping Quantity	Dimensions		
MUR3020UC	TO-247	30 pcs / tube			

Disclaimer

Akyga semi reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Akyga semi or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on Akyga semi data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Akyga semi does not assume any liability arising out of the application or use of any product or circuit. Akyga semi products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Akyga semi. Customers using or selling Akyga semi components for use in such applications do so at their own risk and shall agree to fully indemnify Akyga semi and its subsidiaries harmless against all claims, damages and expenditures.