# **MUR2020DS**

### Ultra-Fast Recovery Diodes Reverse Voltage-200v Forward current-20A

#### **Features**

Ultra-Fast Recoveryt chip Fast reverse recovery time

Ldeal for surface mounted applications

Low power loss, high efficiency

Plastic Case Material has UL Flammability

#### Mechanical Data

Package: TO-252

Terminals:Tin Plated leads, solderable per

Mil-STD-750 Method 2026

Polarity: As marked

Molding compound meets UL 94 V-0 flammability rating,

**ROHS-compliant** 

### Maximum Ratings (Ta=25℃ Unless otherwise)

Type Number	SYMBOL	MUR2020DS	Umit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	V
Maximum RMS Voltage	$V_{RMS}$	140	V
Maximum DC Blocking Voltage	$V_{DC}$	200	V
Maximum Average Forward Rectified Current at TL = 100 °C	IO <sub>(AV)</sub> 20.0		Α
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated		120.0	А
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃	IFSM	240.0	Α
Current squared time @1ms≤t8.3≤ms Tj=25℃,Rating of per diode	l <sup>2</sup> t	49.8	A <sup>2</sup> S
Maximum Forward Voltage at10.0A DC	$V_{FM}$	1.0	V
Maximum Reverse Current TA = 25 ℃	ū	5	
at Rated DC Blocking Voltage TA = 100 ℃	IR	500	- uA
Typical Thermal Pecietance Retween junction to heard	$R_{QJB}$	50	20 004
Typical Thermal Resistance Between junction to board	$R_{QJc}$	2.0	
Operating Junction Temperature Range	$T_J$	55to+150	${\mathbb C}$
Storage Temperature Range	T <sub>STG</sub>	—55to+150	${\mathbb C}$



TO-252



FIG. 1MAXIMUM AVERAGE FORWARD CURRENT DERATING

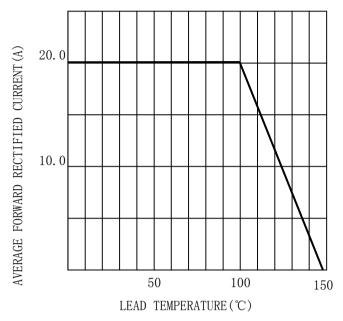


FIG. 2TYPICAL FORWARD CHARACTERISTICS

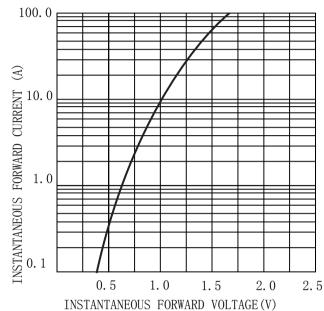


FIG. 3MAXIMUM NON-REPEITIVE SURGE CURRENT

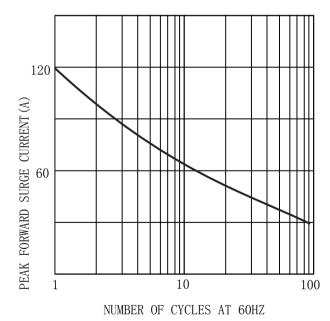
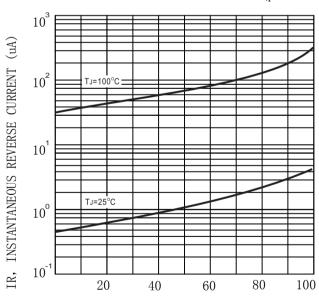


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)

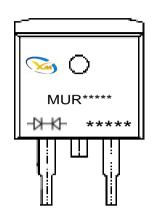


PERCENT OF RATED PEAK REVERSE VOLTAGE (%)



#### MARKING INFORMATION

TO-252/DS



-N-K- = Polar line

🤝 = Logo

= Date Code Marking

= Marking Code MUR\*\*\*\*\*

**Date Code Marking** 

<u>A</u>

Year/month code

001

Order serial number

Example: January 2023 order number is 001, period A001

January 2025 Order number is 001, period A001

Period code year distinction							
2023/2024	2025/2026	2027/2028	2029/2030	2031/2032	remark		
no	first	second	tertius	fourth	Dot above corresponding character		

eriod code month code mapping table												
month	1	2	3	4	5	6	7	8	9	10	11	12
Single year (Example 2023)	Α	В	С	D	Е	F	G	Н	I	J	К	L
Biennial (example 2024)	М	N	0	Р	Q	R	S	Т	U	V	W	Х



## Package Outline Dimensions millimeters

TO-252DS								
	DIV	INC	INCHES		MM			
_ A C _	DIM	min	max	min	max	NOTE		
F	A	0. 25	0.27	6.3	6.9			
e e D	еВ	0. 23	0.25	5.8	6.4			
	C	0.08	0.10	2. 1	2.5			
	D	0.35	0.43	9.0	11.0			
	D E	0.21	0.22	5. 3	5. 5			
	a	0.08	0.10	2. 1	2.5			
	b	0.06	0.06	1.4	1.6			
	С	0.02	0.03	0.6	0.8			
	d	0.02	0.02	0.4	0.6			
	е	0.02	0.02	0.4	0.6			

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