



Ultra-Fast Recovery Diodes 20A FRED



Features

- " \$GRSW)5(' FKLS
- " /RZ IRUZDUG 9ROWDJH GURS
- ")DVW UHYHUVH UHFYHU\ WLPH
- " +LJK IUHTXHQF\ RSHUDWLRQ
- " +LJK SXULW\ KLJK WHPHUDWXUH HSR[\ H
- HQKQDFHG PHFKDQD D DOP RWUMQUWU HVLVWD
- " *XDUG ULQJ IRU HQDWFBGUORJH HGWHP U

Typical Applications

- 7\SLFDO DSSOLFDWLRQV DUH LQ VZLWFKLQJ
- IUHHZKHHOLQJ GLRGHV DQG UHYHUVH EDW

Mechanical Data

- " **Package** 72 \$%
- 0ROGLQJ FRPSRQG PPHWPPDELOLW\
- UDWLQJ 5R+6 FRPSOLDQW
- " **Terminals** 7LQ SODWHG OHDGV VROGHUDEOH S
- DQG -(6' %
- " **Polarity** \$V PDUNHG "

Maximum Ratings 7M 8QOHVV RWKHU\LVH VSHFLILHG

PARAMETER	SYMBOL	UNIT	MURS2030CTS
'HYLFH PDUNLQJ FRGH			0856 &76
5HSHWLWLYH 3HDN 5HYHUVH 9ROWDJH	V_{RRM}	V	9
\$YHUDJH 5HFWLILHG 2XWSXW &XUUHQW # +] VLQH ZDYH 5 ORDG 7F)	I_{TAVG}	A	\$
6XUJH 1RQ UHSHWLWLYH)RUZDUG &XUUHQW # +] KDOI VLQH ZDYH - F\FOH 7D)60	I_{TSM}	A	\$
&XUUHQW 6TXDUHG 7LPH # -FV "W" P,W 7M	I_{TSM}	A	\$ V
6WRUDJH 7HPSHUDWXUH	T_{VJ}	°C	0 V, 100 pA P0p 0
7\SLFDO -XQFWLRQ FDSDFLWDQFH # 8M 0+]	f_{RM}	kHz	S)



MURS2030CTS

Electrical Characteristics

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
, QVWDQWDQHRXV IRUZDUG YROWDJH GURS SHU CLRCH			90 \$ # M -	[REDACTED]		
			90 \$ # 7 M -			
' & UHYHUVH FXUUHQW DW UDWHG ' & EORFNLQJ YROWDJH SHU CLRCH	550		950 9550 7 M -			
	550		950 9550 7 M -			
5HYHUVH 5HFRYHU\ 7LPH	55	QV	90 \$ 50, \$ 55 \$ 7 M -			
			7 M -			
			7 M -			
3HDN UHFRYHU\ FXUUHQW	550	\$	7 M -			
			7 M -			
5HYHUVH UHFRYHU\ FKDUJH		Q &	7 M -			
			7 M -			

Thermal Characteristics

PARAMETER	SYMBOL	UNIT	MURS2030CTS
7KHUPDO 5HVWVWUDQFH	%HWZHHQ MXQFWLRQ DQG FDVH	- :	5
	%HWZHHQ MXQFWLRQ DQG \$LU	- :	5

Ordering Information

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)



MURS2030CTS

Characteristics 7 \ S L F D O

Average Forward Output Current (A)

Case Temperature $\text{Å} \text{ Å}$

FIG2: Surge Forward Current Capability

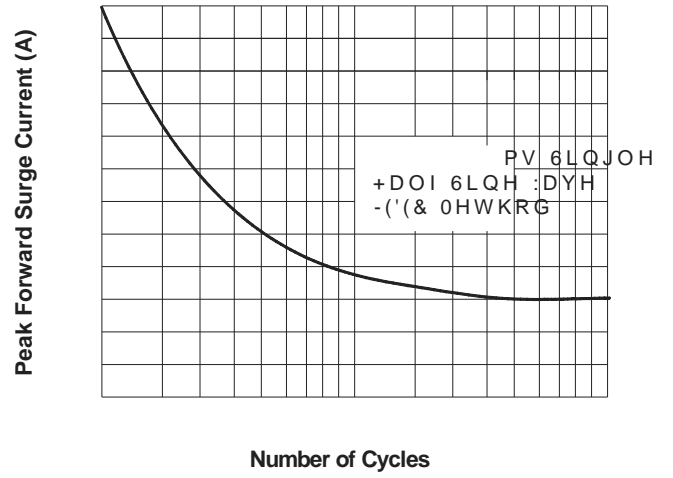
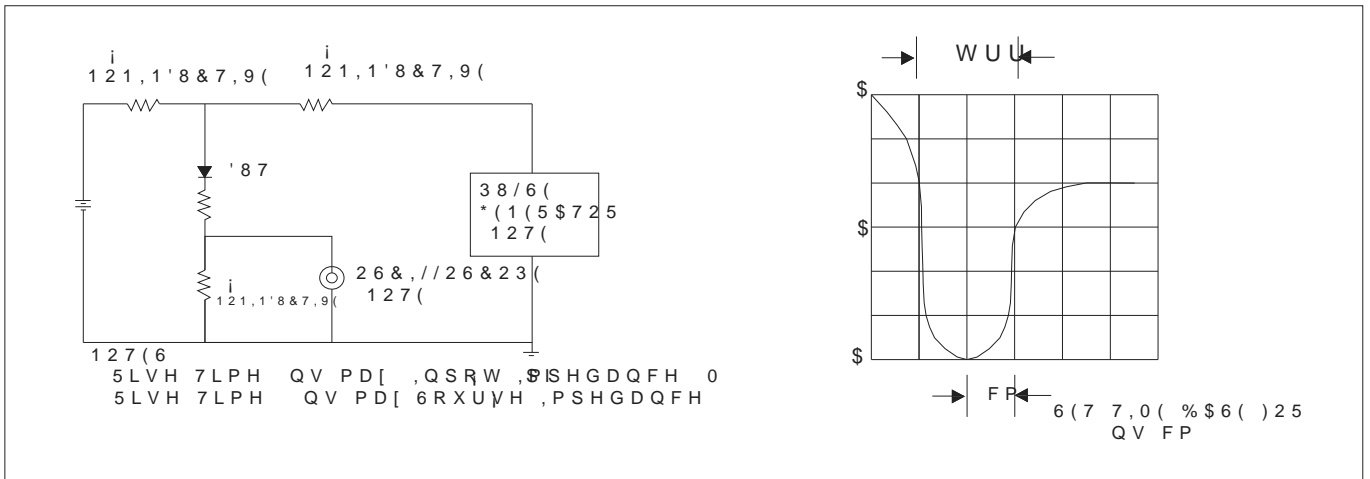


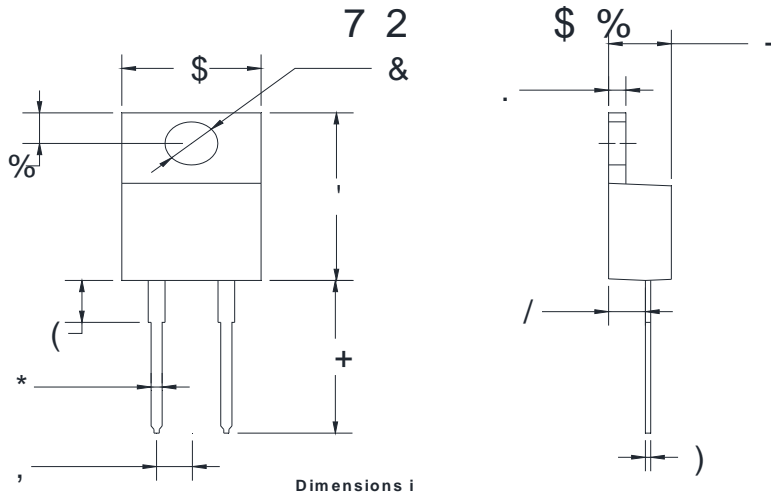
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





MURS2030CTS

Outline Dimensions



72G F G G

@q4RpRfRfSFAA%Re@QqS)RfRfRfBA%-(5 p>P€



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Disclaimer

7KH LQIRUPDWLRQ V GHVFHQWV LQ WKLV DOKUMENT (HDFK) / VHG UHV
ULJKW WR PDNLWKRDXW IRVLSH FIIWL RYVSLRQG R FWWV GLV SPSA RYGHKUHU OILDE WOG MVL JQQ F
RU RWKHU ZLVH

7KH SURGXFW OL VGHV IJHGH WR EH HOHWZLVK R HG XQSRHQW RU GHYLFH W KDQG Q
HTXLSPHQW RU GHYLFHV ZKLFK UHTXLW KHKE DIO IZLVW R RQ XHCOGDEH CHWOK DFKQ DOVLIH
PHGLFDO LQVWUXPHVW R HURXLSH R DFKOHO U UHDFWRHO FROWWURROOHV DQ
GHYLFHV <DQJMLH R V DOK BQH DQVXRIV VARRWHO SRELVQ IEVH VRO VDIQ JGIDRP JMMFK LP
RI VDOH

7KLV SXEOLFDFWRQ SVXFFHUW DQVQLQURUPD XLSRQ LSGHYR XDG GLWLRQDO LQWRUPDWLR
KWV VSZ \DQJMLH R RFR PRQVXOW \RXU QH DUHVW <DQJMLH V DQVFDHOHV RILFH IRU IXUW