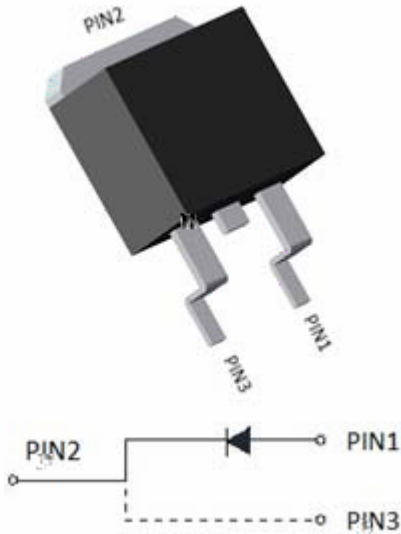


## Ultra-Fast Recovery Diodes 8A FRED



### Features

- Adopt FRED chip
- Low forward Voltage drop
- Fast reverse recovery time
- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

### Typical Applications

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

### Mechanical Data

**Package:** TO-263

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

**Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

**Polarity:** As marked

### Maximum Ratings (T<sub>j</sub>=25 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MURB8120
Device marking code			MURB8120
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	1200
Average Rectified Output Current @60Hz sine wave, R-load, T <sub>c</sub> (FIG.1)	I <sub>O</sub>	A	8
Surge(Non-repetitive) Forward Current @60Hz half sine-wave, 1 cycle, T <sub>j</sub> =25	I <sub>FSM</sub>	A	60
Current Squared Time @1ms t 8.3ms T <sub>j</sub> =25	I <sup>2</sup> t	A <sup>2</sup> s	14.94
Storage Temperature	T <sub>stg</sub>		-55 ~ +150
Junction Temperature	T <sub>j</sub>		-55 ~ +150
Junction capacitance @4V,1MHz	C <sub>j</sub>	pF	26

085%

v(OHFWULFDO & KDUDFWHULVWLFV

3\$5\$0(7(5	6<0%2	81,7	7(67 & 21',7,216	0LQ	7\ S	0D[
,QVWDQWDQHRXV IRUZDUG YROWDJH GURS SHU CLRCH			\$ #7M- \$ #7M -			
'& UHYHUVH FXUUHQW DW UDWHG '& EORFNLQJ YROWDJH SHU CLRCH	550		9 <sub>50</sub> 9 <sub>550</sub> 7M -			
5HYHUVH 5HFRYHU\ 7LPH		QV	\$ 5,0 \$ \$ 7M- 7MUJ 7M -			
3HDN UHFRYHU\ FXUUHQW	550	\$	7M - 7M -	\$ GL GW 9 <sub>50</sub> 9	\$ XV	
5HYHUVH UHFRYHU\ FKDUJH		Q&	7M - 4UU 7M -			

,~c 0•)))



## Characteristics (Typical)

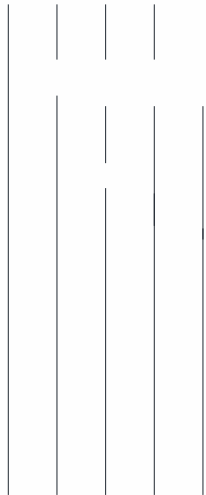


FIG2: Surge Forward Current Capability

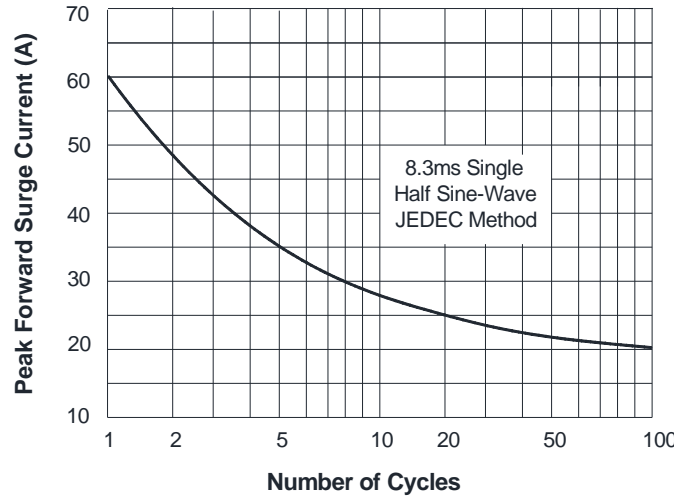


FIG.4: Instantaneous Reverse Characteristics

