

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

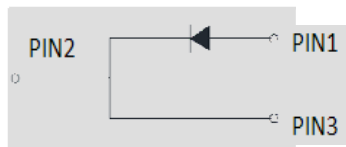
Typical Applications

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

Mechanical Data

Package: TO-220AC

Molding compound meets UL 94 V-0 flammability rating, RoHS-c 5 RAMETER



	SYMBOL	UNIT	MURS860L
Device marking code			MURS860L
Repetitive Peak Reverse Voltage	V_{RRM}	V	600
Average Rectified Output Current @60Hz sine wave, R-load, Tc(FIG.1)	I_o	A	8
Surge(Non-repetitive) Forward Current @60Hz half sine-wave, 1 cycle, Tj=25	I_{FSM}	A	70

Current Squared Time @1ms t 8.3ms Tj=25

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MURS860L

Electrical Characteristics

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max	
Instantaneous forward voltage drop per diode	V_{FM}	V	$I_{FM}=8.0A$ @ $T_j=25$	-	2.7	3.6	
			$I_{FM}=8.0A$ @ $T_j=150$	-	1.8	2.3	
DC reverse current at rated DC blocking voltage per diode	I_{RRM1}	uA	$V_{RM}=V_{RRM}$ $T_j=25$	-	-	10	
	I_{RRM2}		$V_{RM}=V_{RRM}$ $T_j=150$	-	-	100	
Reverse Recovery Time	T_{rr}	ns	$I_F=0.5A$ $I_{RM}=1A$ $I_{RR}=0.25A$ $T_j=25$	-	14	25	
			$T_j=25$		39		
			$T_j=125$		50		
Peak recovery current	I_{RRM}	A	$T_j=25$	$I_F=8A$ $di/dt=-200A/us$ $V_{RM}=400V$	-	1.7	-
			$T_j=125$		-	4.55	-
Reverse recovery charge	Q_{rr}	nC	$T_j=25$		-	34	-
			$T_j=125$		-	113	-

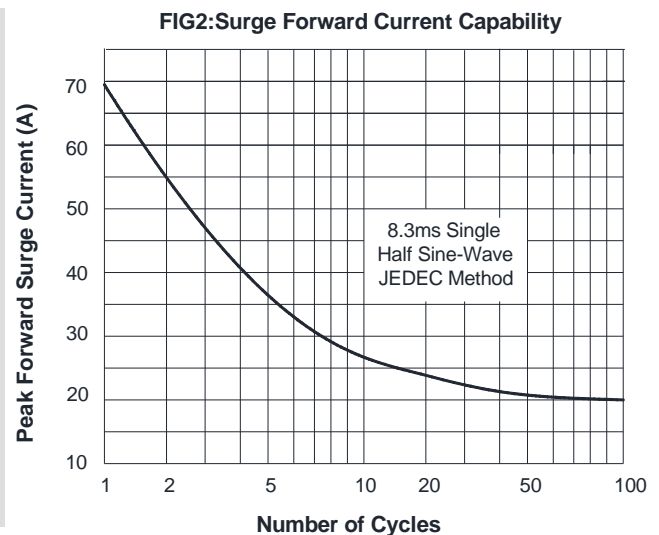
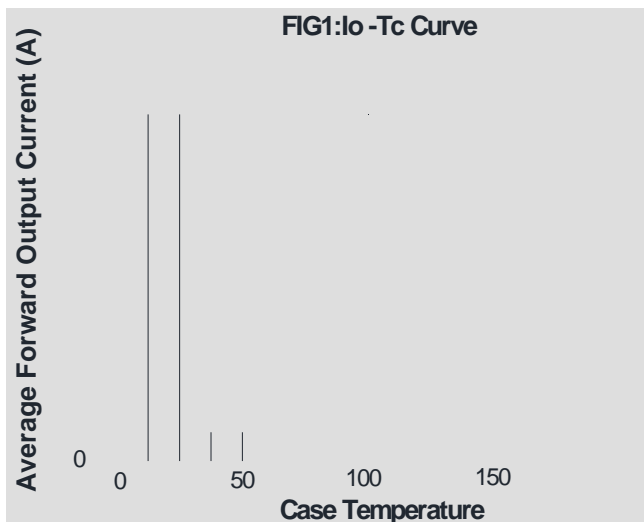
Thermal Characteristics $T_j=25$ Unless otherwise specified

PARAMETER		SYMBOL	UNIT	MURS860L
Thermal Resistance	Between junction and case	R_{J-C}	/W	2.0
	Between junction and Air	R_{J-A}	/W	50

Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MURS860L	Approximate 1.8	50	1000	5000	Tube

Characteristics (Typical)





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