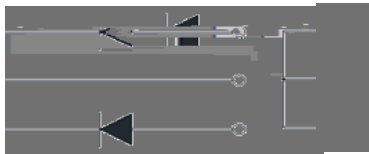
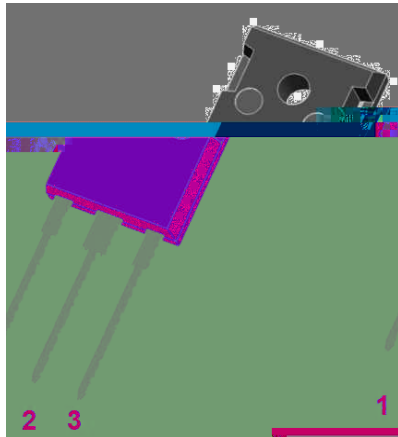


Ultra-Fast Recovery Diodes 30A*2 FRED



Features

- Adopt FRED chip

Typical Applications

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

Mechanical Data

- **Package:** TO-247AB
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_j=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	MUR6040PT
Device marking code			MUR6040PT
Repetitive Peak Reverse Voltage	V _{RRM}	V	400
Average Rectified Output Current @60Hz sine wave, R-load, T _c (FIG.1)	I _O	A	60
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, T _j =25	I _{FSM}	A	300
Current Squared Time @1ms≤t≤8.3ms T _j =25	I ² t	A ² s	373
Single Pulse Avalanche Energy @ T _p =40uS, T _j =25 ,L=15mH	EAS	mJ	485
Storage Temperature	T _{stg}		-55 ~ +175
Junction Temperature	T _j		-55 ~ +175
Typical Junction capacitance @4V,1MHz	C _j	pF	295

MUR6040PT

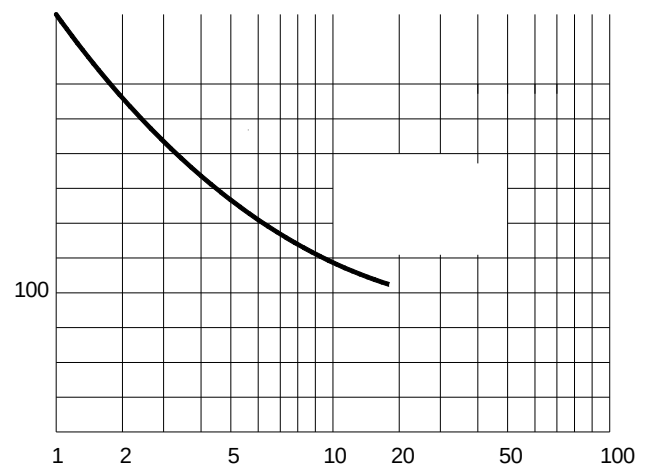
■Electrical Characteristics

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage drop per diode	V_{FM}	V	$I_{FM}=30.0A$ @ $T_J=25$	-	1.2	1.4
			$I_{FM}=30.0A$ @ $T_J=150$		0.96	1.2
DC reverse current at rated DC blocking voltage per diode	I_{RRM1}	μA	$V_{RM}=V_{RRM}$ $T_J=25$	-	-	5.0
	I_{RRM2}		$V_{RM}=V_{RRM}$ $T_J=150$	-	46	200
Reverse Recovery Time	T_{rr}	ns	$I_F=0.5A$ $I_{RM}=1A$ $I_{RR}=0.25A$ $T_J=25$	-	36	50
			$T_J=25$	-	45.5	-
			$T_J=125$	-	85.5	-
Peak recovery current	I_{RRM}	A	$T_J=25$	-	4.0	-
			$T_J=125$	-	9.5	-
Reverse recovery charge	Q_{rr}	nC	$T_J=25$	-	95.5	-
			$T_J=125$	-	410.5	-

■Thermal Characteristics $T_J=25$ Unless otherwise specified

PARAMETER		SYMBOL	UNIT	MUR6040PT
Thermal Resistance	Between junction and case	$R_{\theta J-C}$	$^{\circ}W$	1.0
	Between junction and Air	$R_{\theta J-A}$	$^{\circ}W$	50

■ Characteristics(Typical)





MUR6040PT

Disclaimer

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