

General Description

MUR3040CT device optimized for recovery characteristics to improve efficiency in power supply applications.

Features

- Common Cathode
- Super fast switching for high efficiency
- High forward surge current capability
- RoHS Compliant

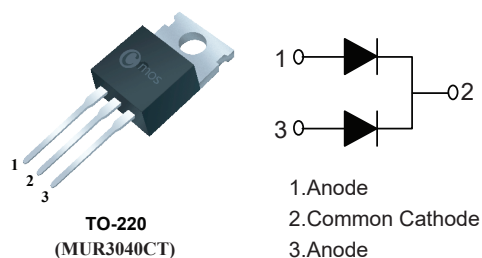
Product Summary

V_{RRM}	V_F	$I_{F(AV)}$
400V	1.4V	30A

Applications

- Switched Mode Power Supplies (SMPS)
- inverter

TO-220 Pin Configuration



Absolute Maximum Ratings

Symbol	Parameter	Rating	Units
V_{RRM}	Peak Repetitive Reverse Voltage	400	V
$I_{F(AV)}$	Average Rectified Forward Current (Rated VR-20KHz Square Wave) - 50% duty cycle	15 (Per Leg) 30 (Total)	A
T_{RR}	Reverse Recovery Time($I_F=0.5A$, $I_R=1A$, $I_{REC}=0.25A$)	≤ 50	nS
I_{FSM}	Forward Peak Surge Current(Rated Load 8.3ms Half Mssine Wave-According to JEDEC Method)	150X2	A
T_J	Operating Junction Temperature	150	°C
T_{STG}	Storage Temperature	-40 to 150	°C

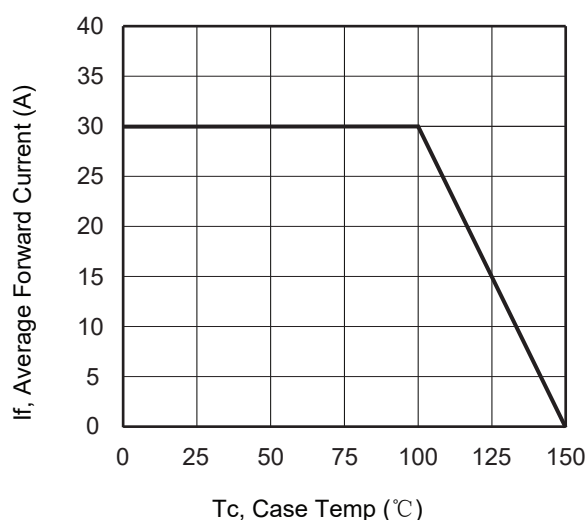
Thermal Data

Symbol	Parameter	Typ.	Max.	Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case(Per Leg)	2	---	°C/W

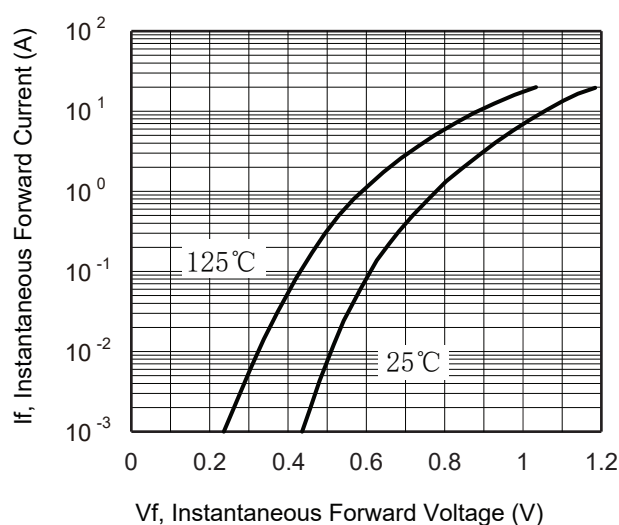
Electrical Characteristics

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
V_F	Forward Voltage Drop per diode	$I_F=15A$, $T_c=25^{\circ}C$ ($I_{FAV}=15A^*2$)	---	1.1	1.4	V
		$I_F=15A$, $T_c=125^{\circ}C$ ($I_{FAV}=15A^*2$)	---	---	1.3	
I_R	Reverse Leakage Current per diode	$V_R=400V$, $T_c=25^{\circ}C$	---	---	0.01	mA
		$V_R=400V$, $T_c=125^{\circ}C$	---	---	0.1	

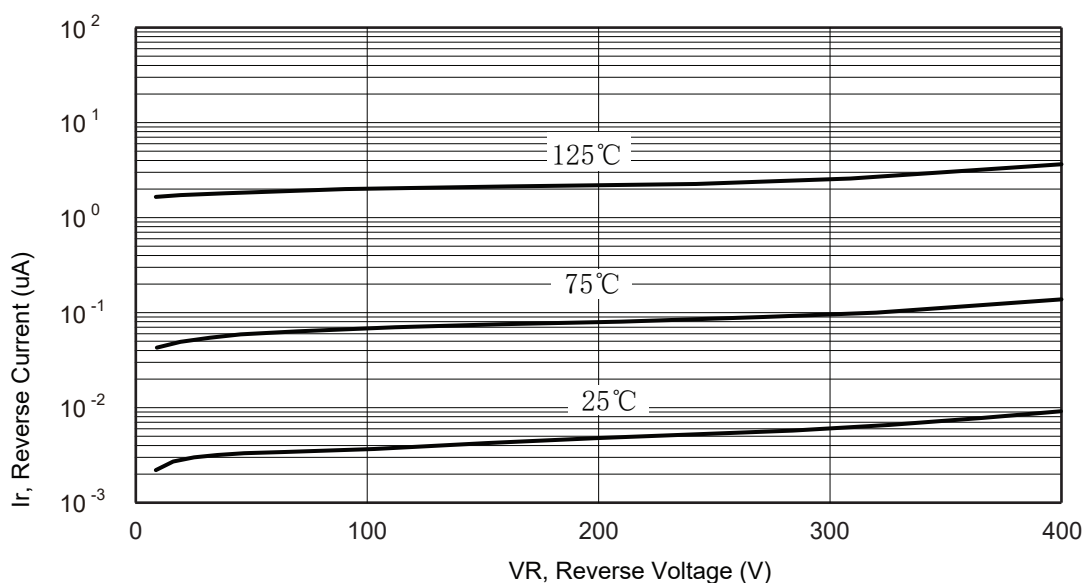
Characteristic Curves



Current derating curve, per element



The forward voltage and forward current curve



The reverse leak current and the reverse voltage (single-device) curve

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Cmos reserves the right to improve product design, functions and reliability without notice. Please refer to the latest version of specification.