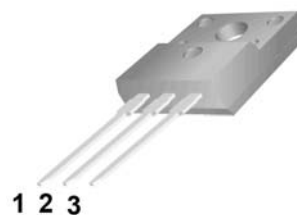


**●Features:**

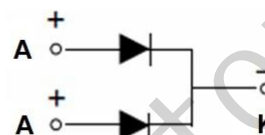
- Common Cathode Structure
- Low Power Loss and High Efficiency
- Low Forward Voltage Drop
- High Surge Capability

**●Application:**

- High Frequency Switch
- Free Wheeling, and Polarity Protection Applications



TO-220F


**Absolute Maximum Ratings**( $T_c=25^{\circ}\text{C}$  unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{RRM}$	Maximum Repetitive Reverse Voltage	45	V
$V_R$	Maximum DC Reverse Voltage	45	V
$I_{F(AV)}$	Average Rectified Forward Current, $T_c=120^{\circ}\text{C}$	5(Per Leg) 10(Per Device)	A
$I_{FSM}$	Peak Forward Surge Current, 8.3ms Half Sine wave	125	A
$T_j$	Operating Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-55 to +150	$^{\circ}\text{C}$

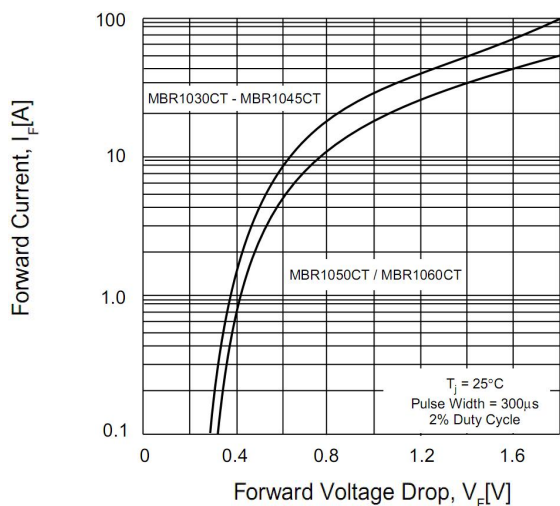
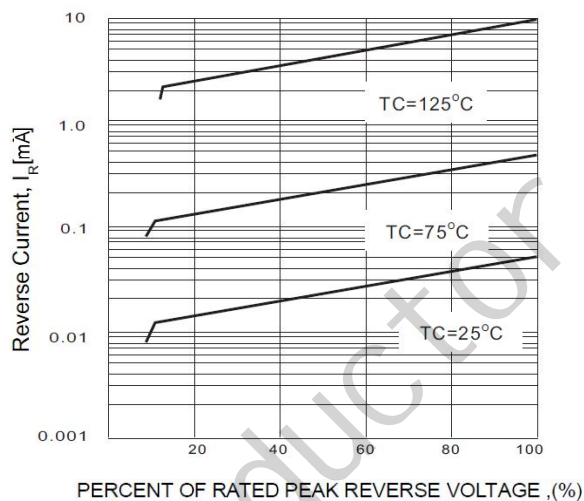
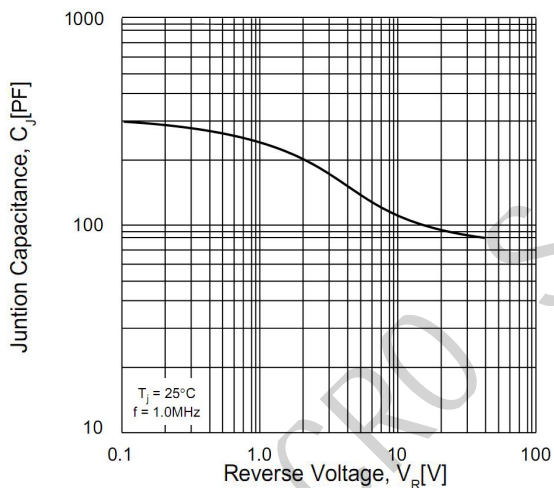
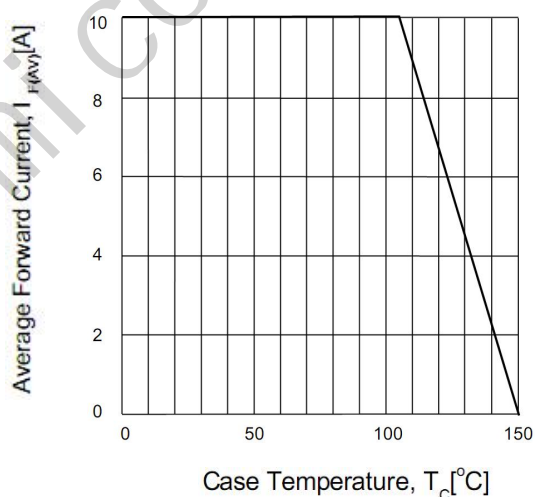
**Thermal Characteristics**( $T_c=25^{\circ}\text{C}$  unless otherwise noted)

Symbol	Parameter	Max	Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case Per Leg	2.5	$^{\circ}\text{C}/\text{W}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient Per Leg	105	$^{\circ}\text{C}/\text{W}$

**Electrical Characteristics**( $T_c=25^{\circ}\text{C}$  unless otherwise noted)

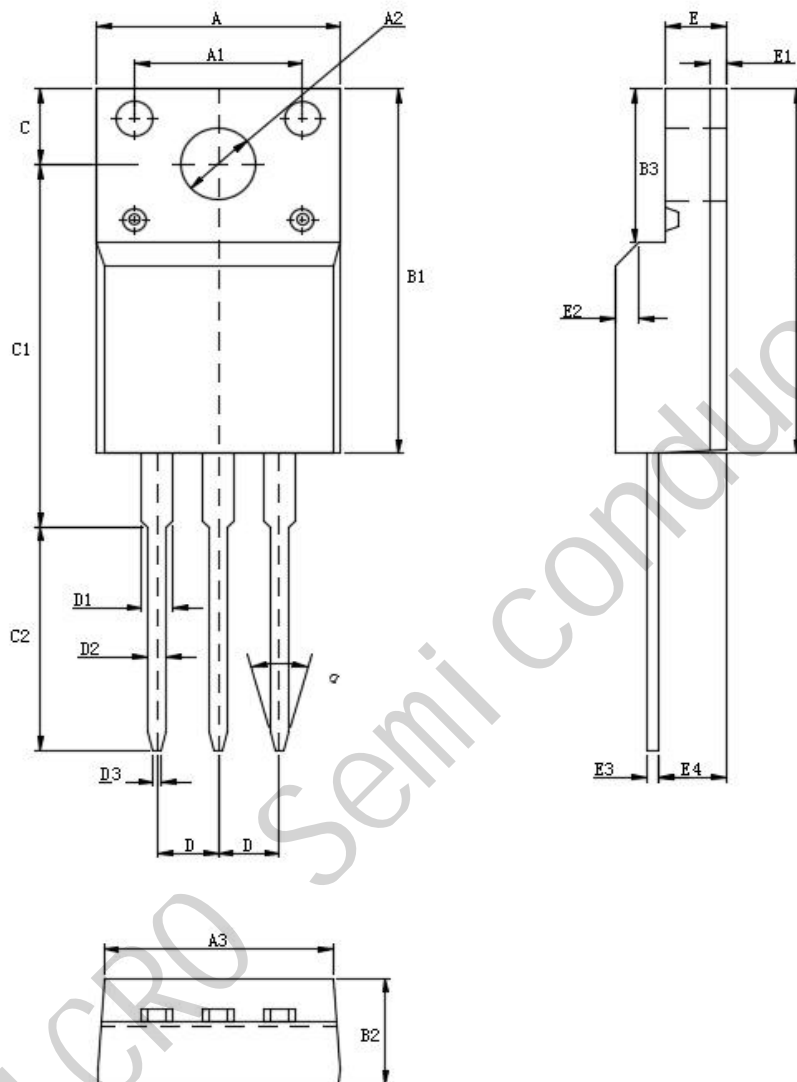
Symbol	Parameter	Test Conditions	Min	Max	Unit
$V_{RRM}$	Maximum Repetitive Reverse Voltage	$I_R=100\mu\text{A}$	45		V
$I_R$	Reverse Current	$V_R=45\text{V}$ $T_c=25^{\circ}\text{C}$ $V_R=45\text{V}$ $T_c=125^{\circ}\text{C}$		0.1 50	mA
$V_F$	Forward Voltage	$I_F=5\text{A}$ $T_c=25^{\circ}\text{C}$ $I_F=5\text{A}$ $T_c=125^{\circ}\text{C}$ $I_F=10\text{A}$ $T_c=25^{\circ}\text{C}$ $I_F=10\text{A}$ $T_c=125^{\circ}\text{C}$		0.63 0.58 0.73 0.68	V

## Typical Performance Characteristics

**Figure 1. Forward Current Characteristics**

**Figure 2. Reverse Leakage Current**

**Figure 3. Junction Capacitance**

**Figure 4. Power Derating**


## Package Information

TO-220F



UNIT: mm

SYMBOL	min	nom	max	SYMBOL	min	nom	max
A	9.80		10.60	D		2.54	
A1		7.00		D1	1.15		1.55
A2	2.90		3.40	D2	0.60		1.00
A3	9.10		9.90	D3	0.20		0.50
B1	15.40		16.40	E	2.24		2.84
B2	4.35		4.95	E1		0.70	
B3	6.00		7.40	E2		1.0×45°	
C	3.00		3.70	E3	0.35		0.65
C1	15.00		17.00	E4	2.30		3.30
C2	8.80		10.80	α (度)		30°	

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [MOSFET](#) category:*

*Click to view products by [JSMSEMI](#) manufacturer:*

Other Similar products are found below :

[IRFD120](#) [JANTX2N5237](#) [BUK455-60A/B](#) [MIC4420CM-TR](#) [VN1206L](#) [NDP4060](#) [SI4482DY](#) [IPS70R2K0CEAKMA1](#) [SQD23N06-31L-GE3](#)  
[TK16J60W,S1VQ\(O](#) [2SK2614\(TE16L1,Q\)](#) [DMN1017UCP3-7](#) [DMN1053UCP4-7](#) [SQJ469EP-T1-GE3](#) [NTE2384](#) [DMC2700UDMQ-7](#)  
[DMN2080UCB4-7](#) [DMN61D9UWQ-13](#) [US6M2GTR](#) [DMN31D5UDJ-7](#) [DMP22D4UFO-7B](#) [DMN1006UCA6-7](#) [DMN16M9UCA6-7](#)  
[STF5N65M6](#) [IRF40H233XTMA1](#) [STU5N65M6](#) [DMN6022SSD-13](#) [DMN13M9UCA6-7](#) [DMTH10H4M6SPS-13](#) [DMN2990UFB-7B](#)  
[IPB80P04P405ATMA2](#) [2N7002W-G](#) [MCAC30N06Y-TP](#) [MCQ7328-TP](#) [BXP7N65D](#) [BXP4N65F](#) [AOL1454G](#) [WMJ80N60C4](#) [BXP2N20L](#)  
[BXP2N65D](#) [BXT1150N10J](#) [BXT1700P06M](#) [TSM60NB380CP](#) [ROG](#) [RQ7L055BGTCR](#) [DMNH15H110SK3-13](#) [SLF10N65ABV2](#)  
[BSO203SP](#) [BSO211P](#) [IPA60R230P6](#) [IPA60R460CE](#)