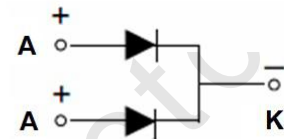
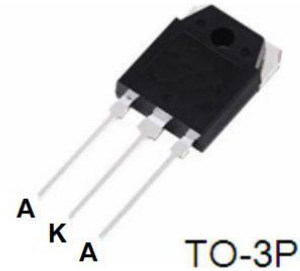


●Features:

- 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


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

Symbol	Parameter	Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	100	V
V_R	Maximum DC Reverse Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current, $T_c=120^{\circ}\text{C}$	15(Per Leg) 30(Per Device)	A
I_{FSM}	Peak Forward Surge Current, 8.3ms Half Sine wave	250	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	1.4	$^{\circ}\text{C}/\text{W}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient Per Leg	59	$^{\circ}\text{C}/\text{W}$

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

Symbol	Parameter	Test Conditions	Min	Max	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	$I_R=100\mu\text{A}$	100		V
I_R	Reverse Current	$V_R=100\text{V}$ $T_c=25^{\circ}\text{C}$ $V_R=100\text{V}$ $T_c=125^{\circ}\text{C}$		0.1 5	mA
V_F	Forward Voltage	$I_F=15\text{A}$ $T_c=25^{\circ}\text{C}$ $I_F=15\text{A}$ $T_c=125^{\circ}\text{C}$ $I_F=30\text{A}$ $T_c=25^{\circ}\text{C}$ $I_F=30\text{A}$ $T_c=125^{\circ}\text{C}$		0.88 0.78 1.05 0.95	V

Typical Performance Characteristics

Figure 1. Forward Current Characteristics

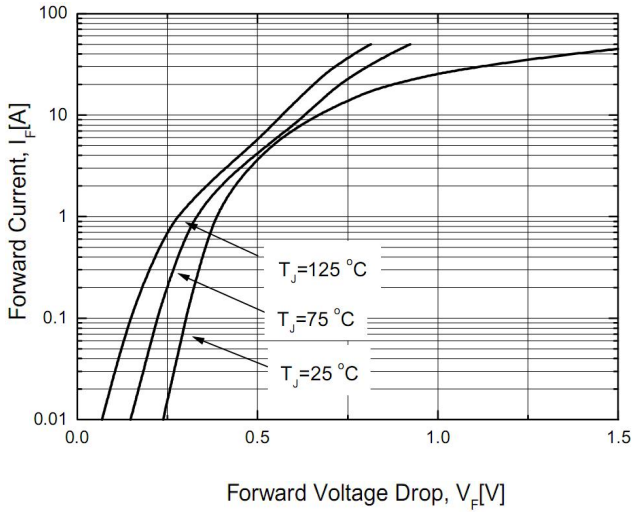


Figure 2. Reverse Leakage Current

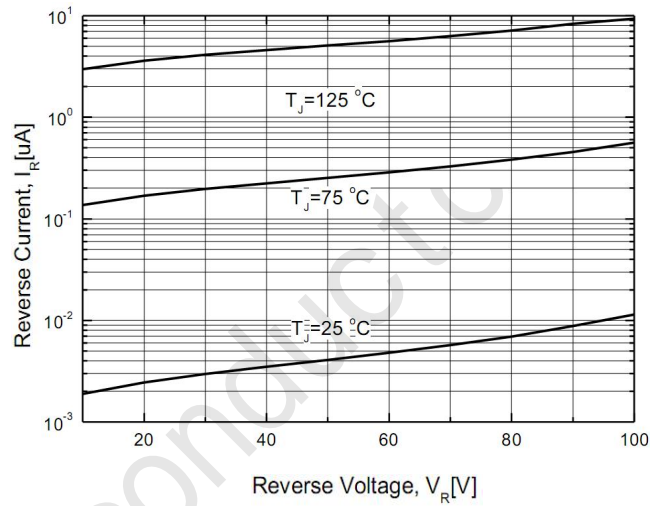


Figure 3. Junction Capacitance

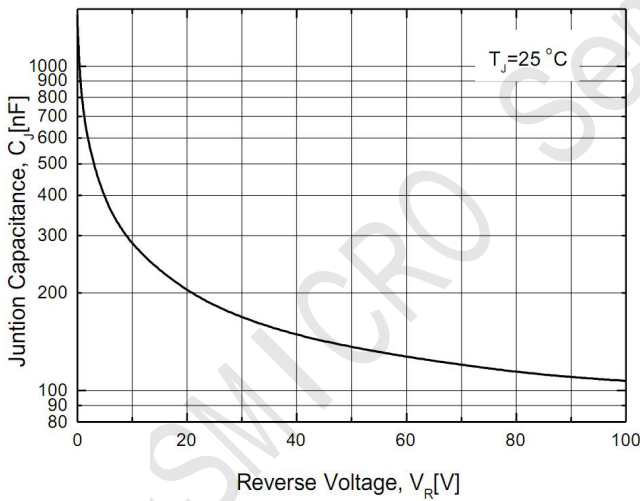
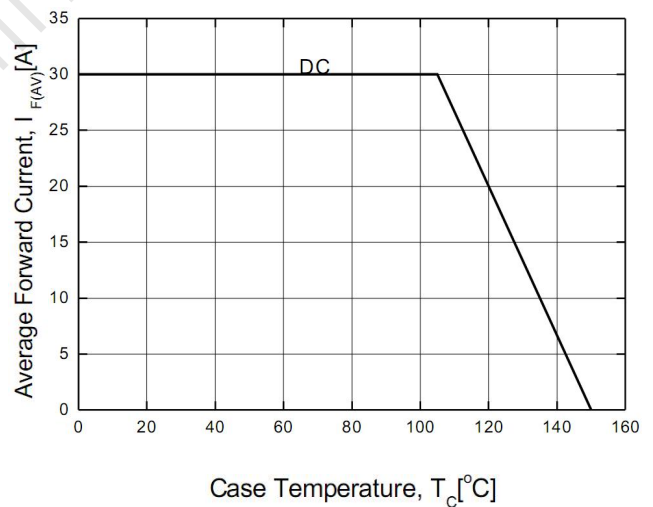
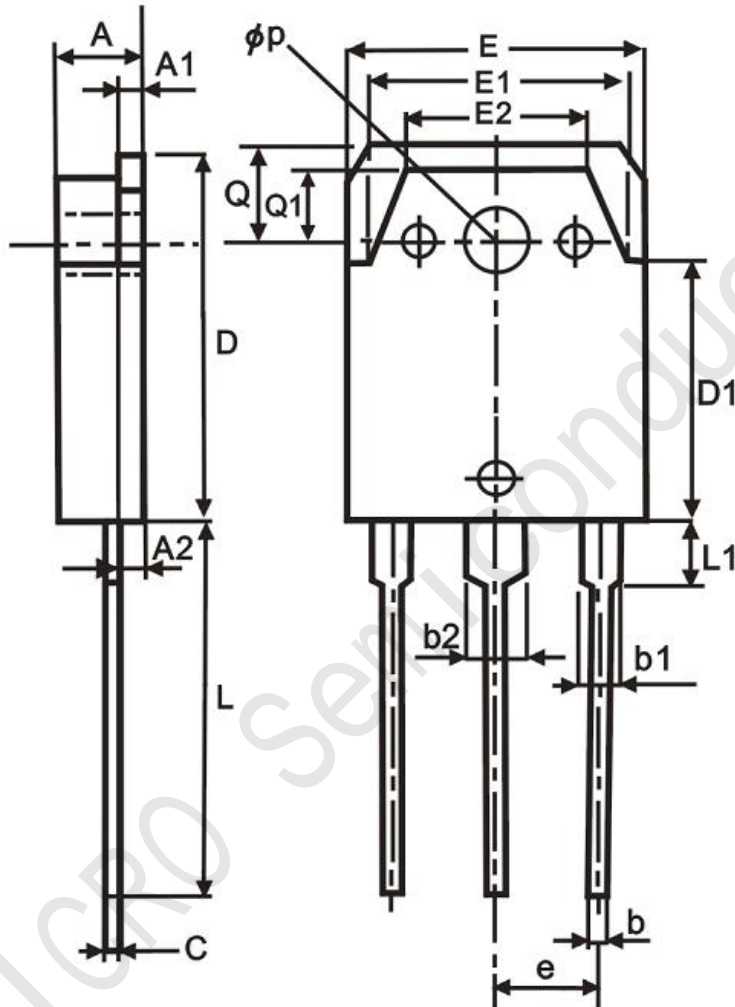


Figure 4. Power Derating



TO-3P Package Dimensions



UNIT: mm

SYMBOL	min	nom	max	SYMBOL	min	nom	max
A	4.40		5.10	E	15.20		16.20
A1	1.40	1.50	1.70	E1		13.60	
A2	2.10	2.40	2.70	E2		9.60	
b	0.80	1.00	1.20	e	5.15	5.45	5.75
b1	1.90		2.30	L	19.00	20.00	21.00
b2	2.90		3.30	L1	2.50		3.50
C	0.45	0.60	0.75	Q		5.10	
D	19.40	19.90	20.40	Q1		3.90	
D1		13.90					