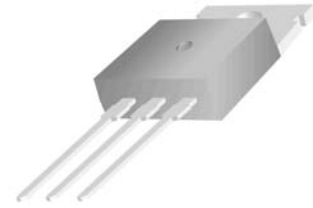


● **Features:**

- 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)

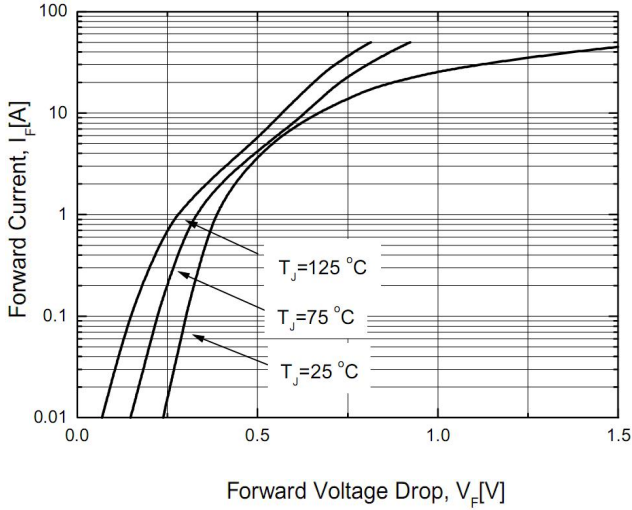
Symbol	Parameter	Max	Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case Per Leg	2.0	$^{\circ}\text{C}/\text{W}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient Per Leg	84	$^{\circ}\text{C}/\text{W}$

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

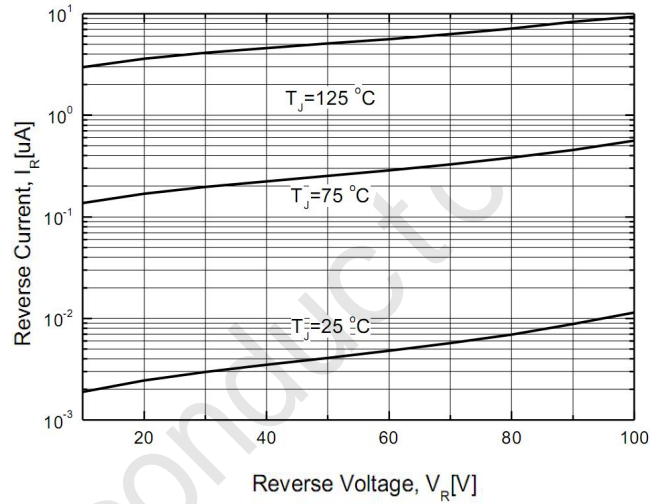
Symbol	Parameter	Test Conditions	Min	Max	Unit
$V_{RRM}$	Maximum Repetitive Reverse Voltage	$I_R=100\mu\text{A}$	100		V
$I_R$	Reverse Current	$V_R=100\text{V}$ $T_c=25^{\circ}\text{C}$ $V_R=100\text{V}$ $T_c=125^{\circ}\text{C}$		0.1 5	mA
$V_F$	Forward Voltage	$I_F=15\text{A}$ $T_c=25^{\circ}\text{C}$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

**Typical Performance Characteristics**

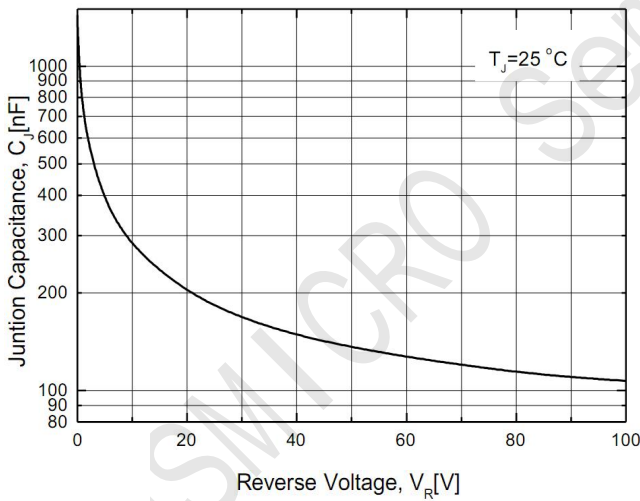
**Figure 1. Forward Current Characteristics**



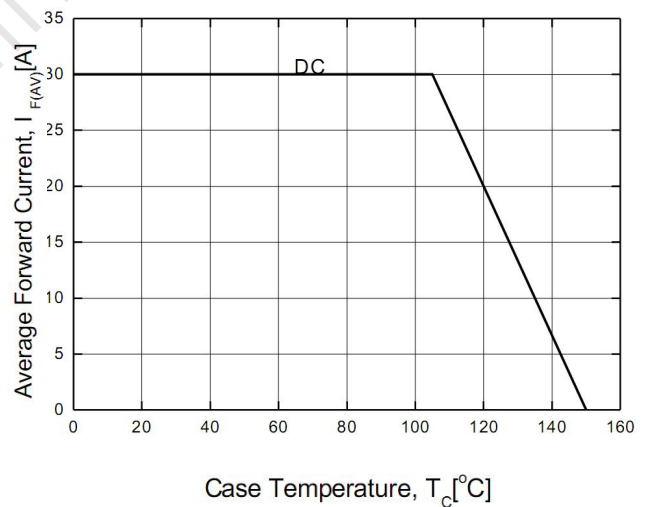
**Figure 2. Reverse Leakage Current**



**Figure 3. Junction Capacitance**

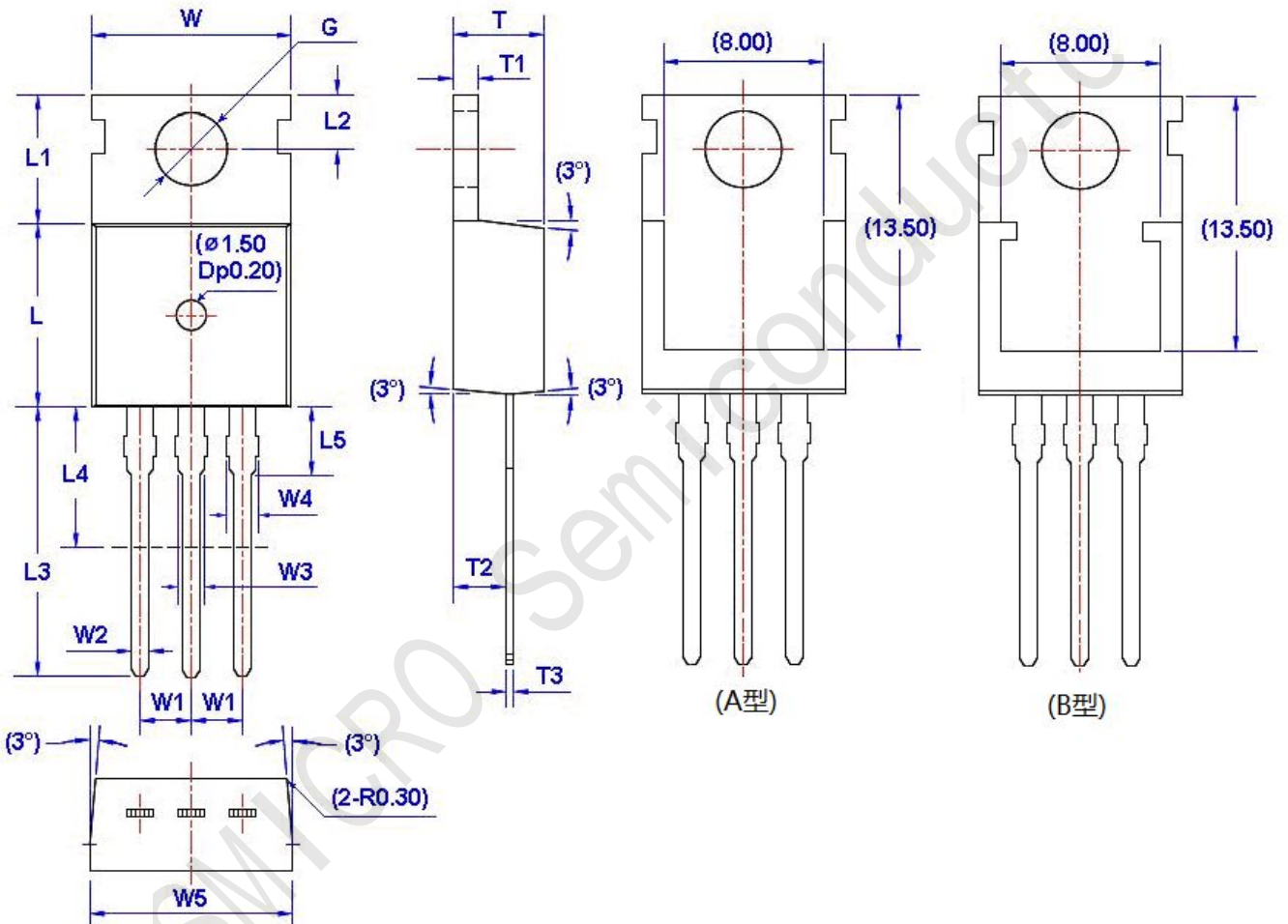


**Figure 4. Power Derating**



TO-220AB

Unit: mm



Symbol	Size		Symbol	Size		Symbol	Size		Symbol	Size	
	Min	Max		Min	Max		Min	Max		Min	Max
W	9.66	10.28	W5	9.80	10.20	L4**	6.20	6.60	T3	0.45	0.60
W1	2.54 (TYP)		L	9.00	9.40	L5	2.79	3.30	G(Φ)	3.50	3.70
W2	0.70	0.95	L1	6.40	6.80	T	4.30	4.70			
W3	1.17	1.37	L2	2.70	2.90	T1	1.15	1.40			
W4*	1.32	1.72	L3	12.70	14.27	T2	2.20	2.60			