

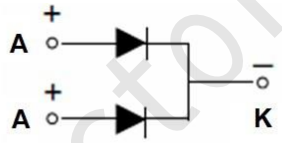
●Features：

■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(Tc=25°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, Tc=120°C	15(Per Leg) 30(Per Device)	A
I_{FSM}	Peak Forward Surge Current,8.3ms Half Sine wave	250	A
Tj	Operating Junction Temperature	150	°C
Tstg	Storage Temperature Range	-55 to+150	°C

Thermal Characteristics(Tc=25°C unless otherwise noted)

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

Electrical Characteristics(Tc=25°C unless otherwise noted)

Symbol	Parameter	Test Conditons	Min	Max	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	I_R=100μA	100		V
I_R	Reverse Current	V_R =100V Tc=25°C V_R =100V Tc=125°C		0.1 5	mA
V_F	Forward Voltage	I_F=15A Tc=25°C I_F=15A Tc=125°C I_F=30A Tc=25°C I_F=30A Tc=125°C		0.88 0.78 1.05 0.95	V

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Typical Performance Characteristics

Figure 1. Forward Current Characteristics

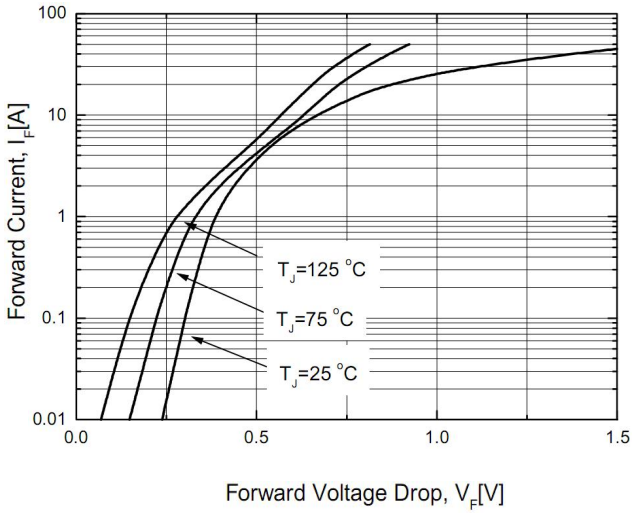


Figure 2. Reverse Leakage Current

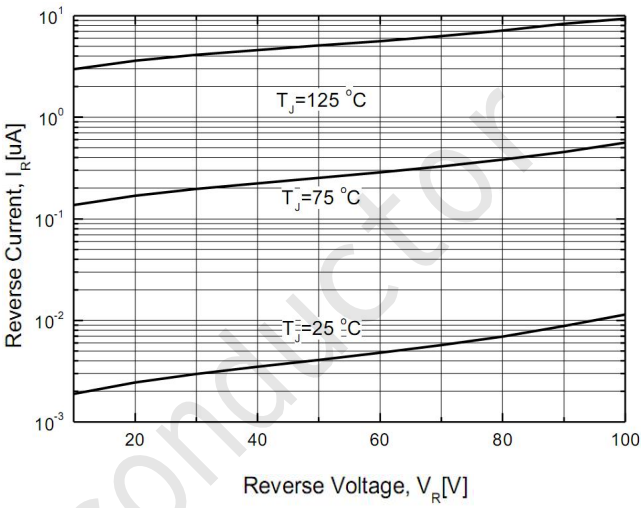


Figure 3. Junction Capacitance

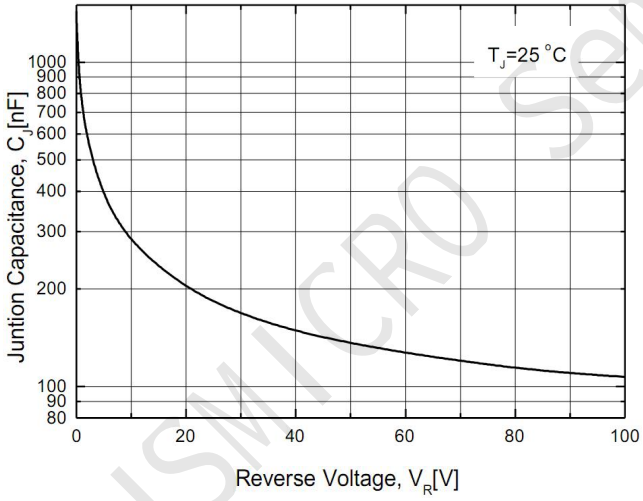
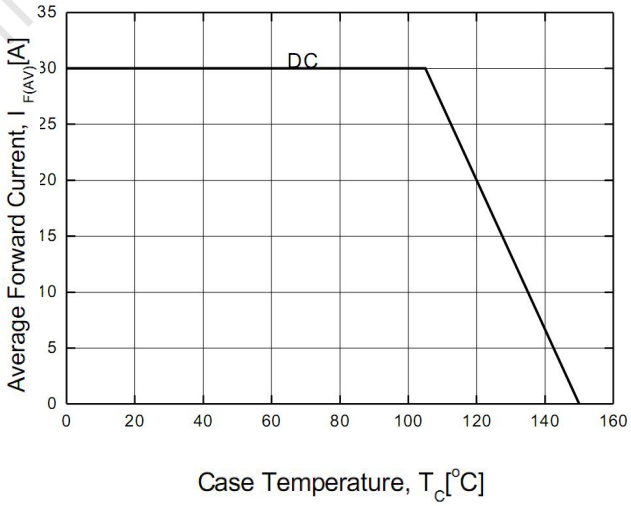


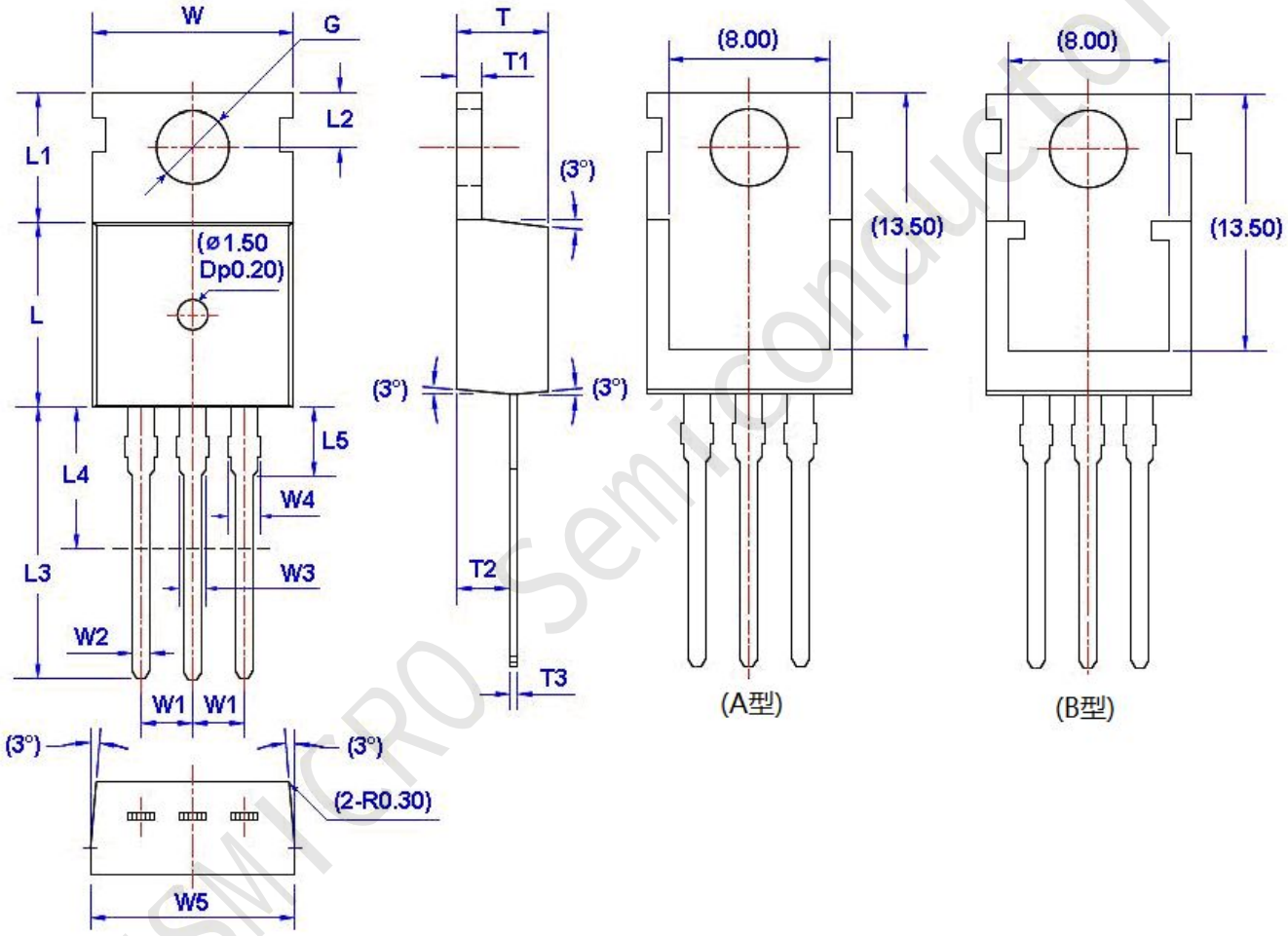
Figure 4. Power Derating



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TO-220AB

Unit: mm



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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			