



Absolute Maximum Ratings

$T_C = 25^{\circ}\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Repetitive Peak Reverse Voltage	650	V
V_{RSM}	Surge Peak Reverse Voltage	650	V
V_{DC}	DC Blocking Voltage	650	V
I_F	Continuous Forward Current	$T_C = 25^{\circ}\text{C}$ $T_C = 150 \square$	

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

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
V_F	Forward Voltage	$I_F = 10\text{A}, T_C = 25^\circ\text{C}$ $I_F = 10\text{A}, T_C = 175^\circ\text{C}$	--	1.35 1.65	1.65 1.95	V
I_R	Reverse Current	$V_R = 650\text{V}, T_C = 25^\circ\text{C}$ $V_R = 650\text{V}, T_C = 175^\circ\text{C}$	--	20 40	50 500	μA
Q_C	Total Capacitive Charge	$V_R = 400\text{V}$	--	27	--	nC
C	Total Capacitance	$V_R = 1\text{V}, T_J = 25^\circ\text{C}, f = 1\text{MHz}$ $V_R = 520\text{V}, T_J = 25^\circ\text{C}, f = 1\text{MHz}$	--	467 67	--	pF

Thermal Characteristics $T_C = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Min	Typ	Max	Units
R	Thermal Resistance, Junction-to-Case	--	1.45 / 0.73	1.74 / 0.87	$^\circ\text{C}/\text{W}$

* Per Leg / Per Device

Package Marking and Ordering Information

Device Marking	Device	Package	Reel Size	Tape Width	Quantity
PD020065L2P	PD020065L2P	TO-220_3L	-	-	50
PD020065L2P_G	PD020065L2P_G	TO-220_3L	-	-	50

* PD020065L2P_G : RoHS Compliant

Typical Characteristics (Per Leg)

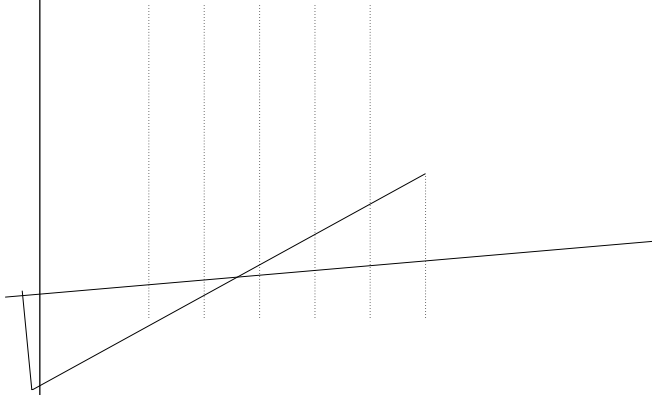


Figure 1. Forward Characteristics

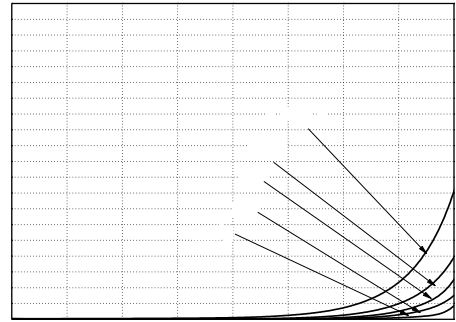


Figure 2. Reverse Characteristics



Figure 3. Power Dissipation



Figure 4. Transient Thermal Resistance

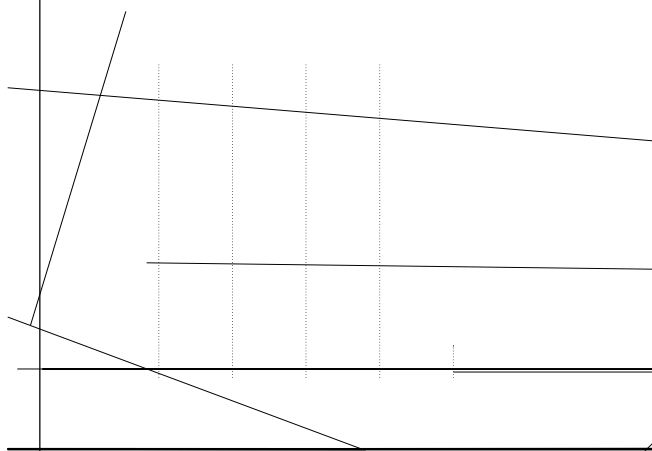


Figure 5. Peak Forward Current Derating

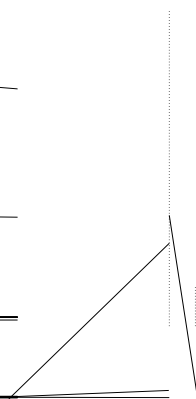


Figure 6. Non-Repetitive Peak Forward Surge Current vs. Pulse Duration

Typical Characteristics (Per Leg)



Figure 7. Total Capacitive Charge



Figure 8. Total Capacitance



Figure 9. Capacitance Store Energy

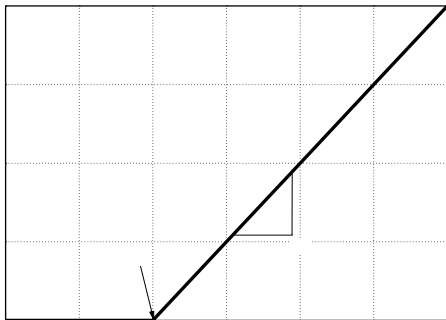


Figure 10. Equivalent Forward Current Curve

$$V_F = V_{TH} + R_{DIFF} \times I_F$$

Threshold Voltage (V_{TH})

$$V_{TH}(T_j) = -0.001 \times (T_j) + 0.950 \text{ [V]}$$

Differential Resistance (R_{DIFF})

$$R_{DIFF}(T_j) = A \times T_j^2 + B \times T_j + C \text{ [\Omega]}$$

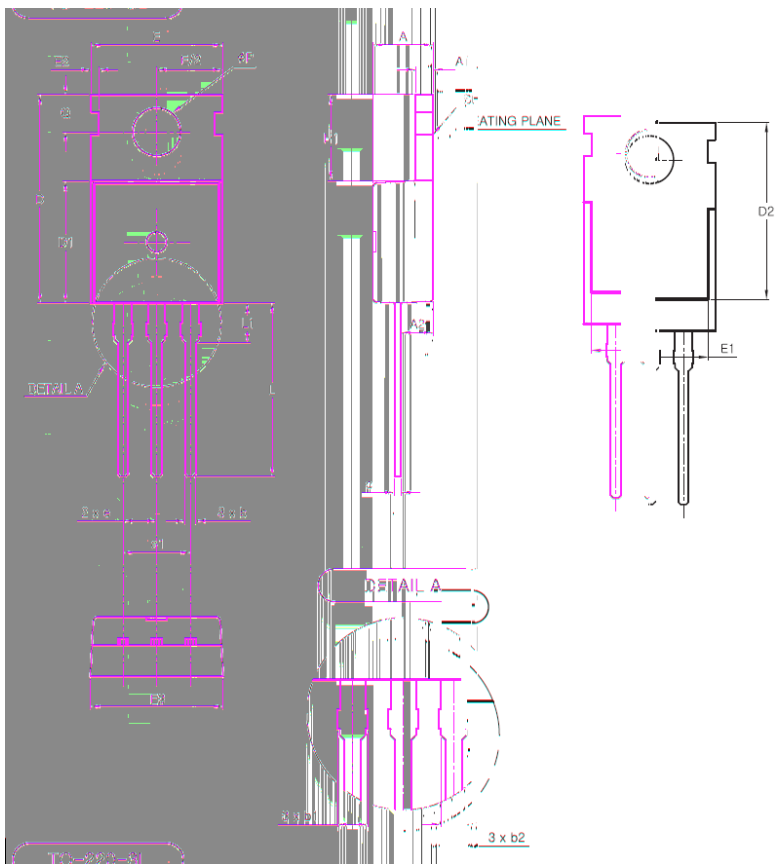
$$A = 7.50 \times 10^{-7}$$

$$B = 9.16 \times 10^{-5}$$

$$C = 4.19 \times 10^{-2}$$

$$[T_j \text{ [}^\circ\text{C]}; -55 \text{ }^\circ\text{C} \leq T_j \leq 175 \text{ }^\circ\text{C}; I_F \leq 10 \text{ A}]$$

Package Information

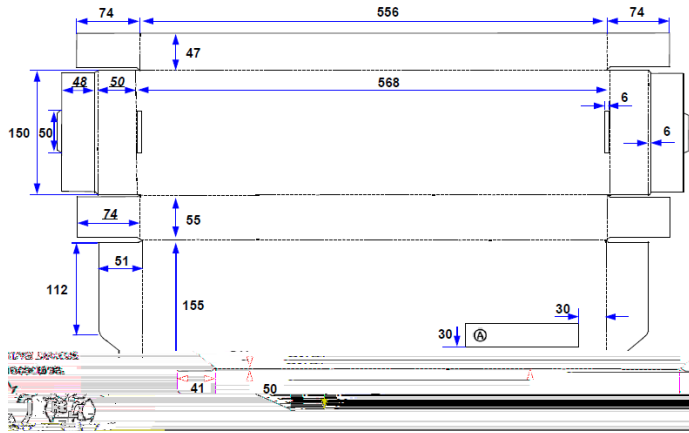


Pin No.	Signal Name	Signal Name	Signal Name
1	BC0	180	MX
2	1.80	180	0
3	2.80	180	0
4	3.40	180	0
5	3.70	180	0
6		180	0
7		180	2
8		180	7
9	SIDE PROTECT	180	0
10	OUT OF CORE	180	0
11	MIN	180	0
12	1.80	180	0
13	1.20	180	0
14	1.70	180	0
15	1.42	180	0
16	1.7	180	0
17	1.45	180	0
18	1.50	180	0
19	1.80	180	8
20	1.10	180	0
21	1.70	180	0
22		180	0
23		180	0
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100		180	0

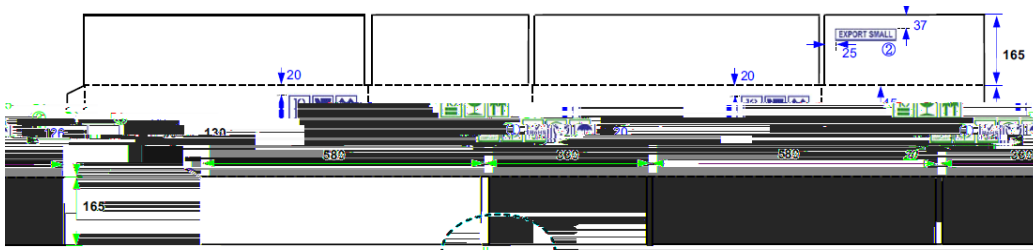
DIMENSIONS.

Packing Information

Inner Box



Outer Box



[BOX PRINTING MARKING]

① 5'K180°KLB175
200°K200°SWK175

② EXPORT SMALL
MARKING SIZE (112*20)
COLOR (DARK-BLUE)

③

[NOTE]
1. MATERIAL : KLB175°K180°KLB175°
(SWK175°K200°K
2. QTY : 3 PCS

ROHS

CHECKED-BY: _____ APPROVED-BY: _____ UNIT: _____ mm MARKIN



Notes

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