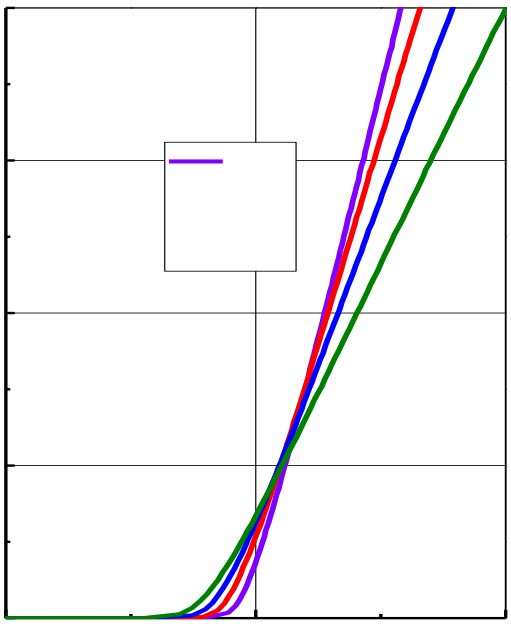
Electrical Characteristics(Per Leg)

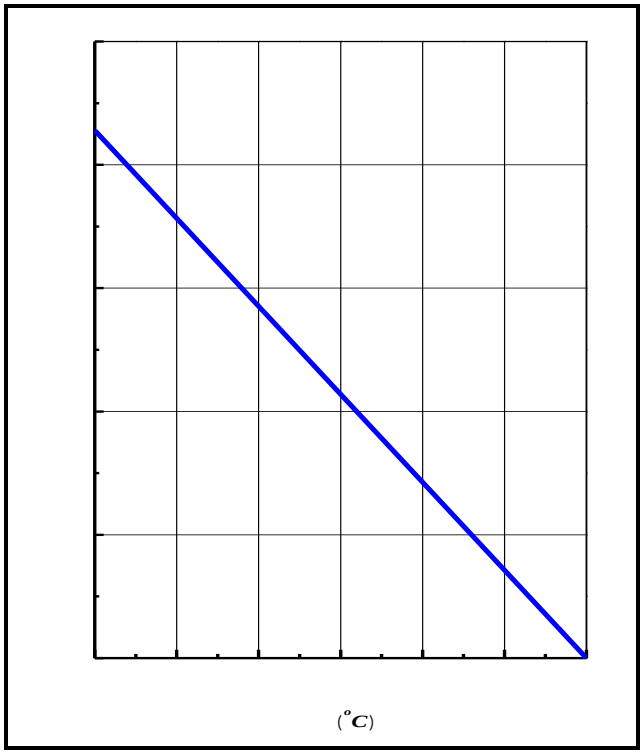
Thermal Characteristics

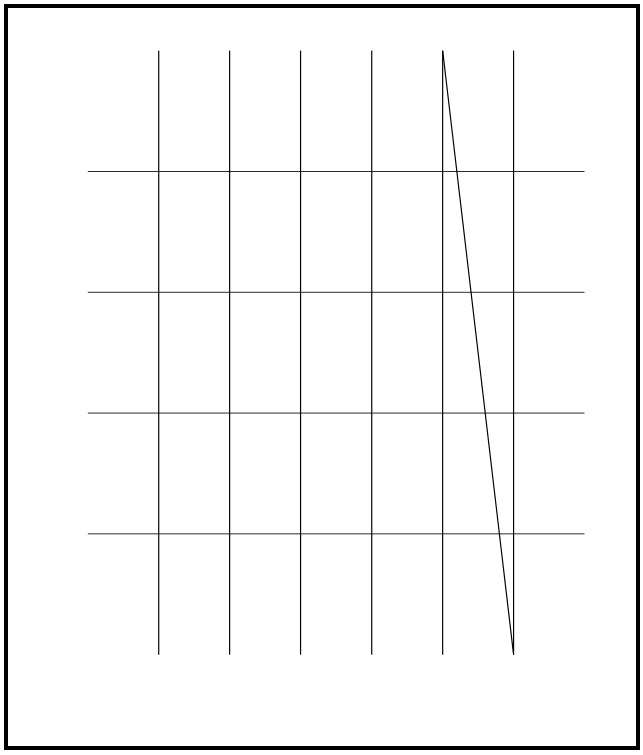
Symbol	Parameter	Typ.	Unit	Note

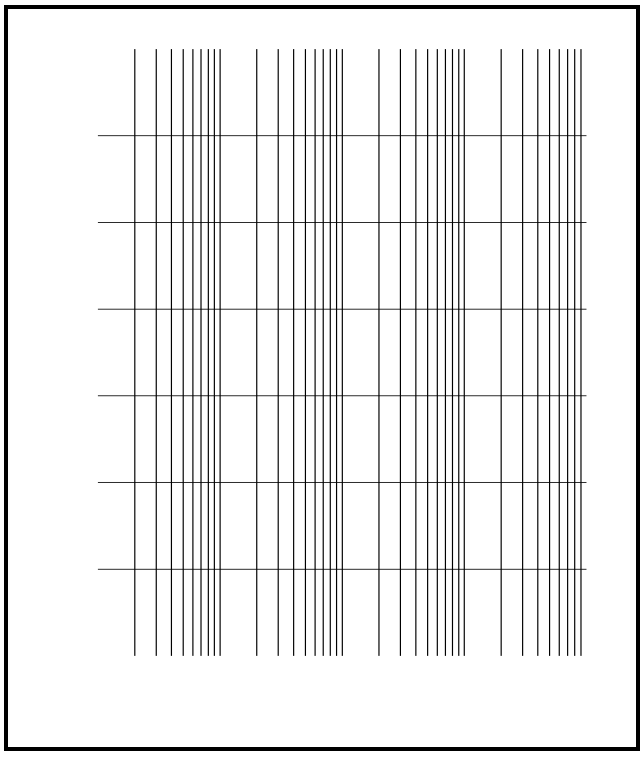
Typical Performance(P ref.seg)

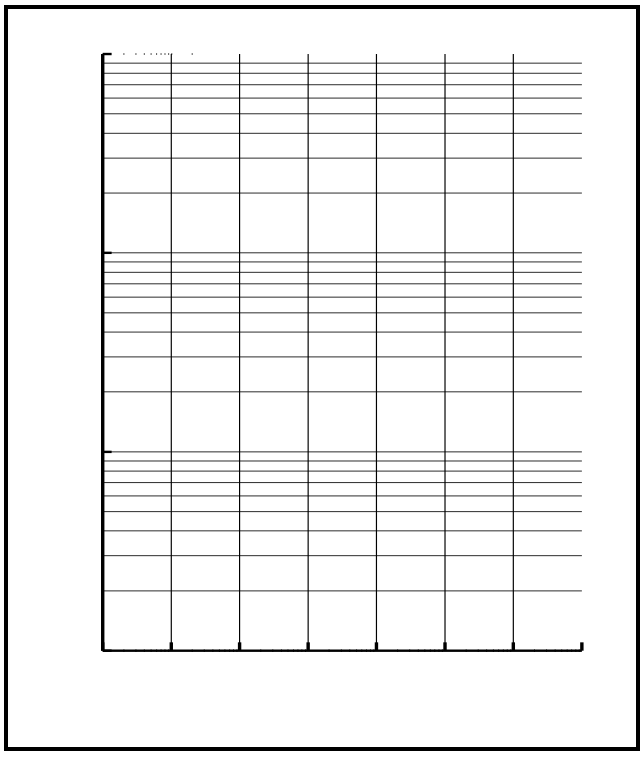


Typical Performance(Per Leg)





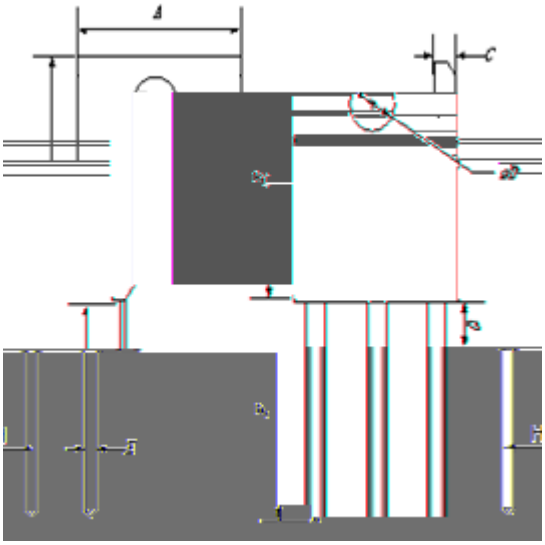




Package Dimensions

Package TO-247-3

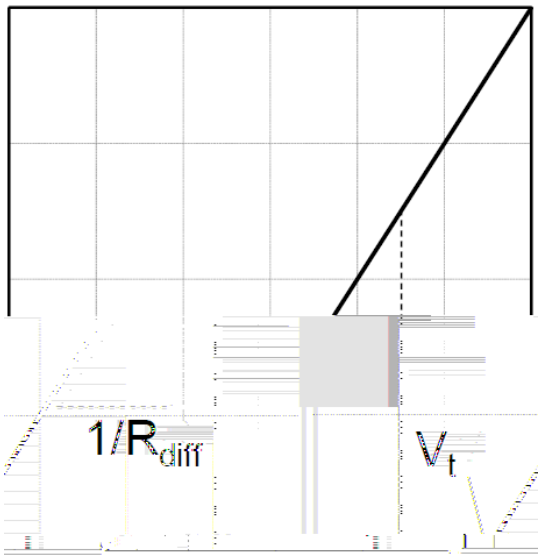




Symbol	Min. (mm)	Typ. (mm)	Max. (mm)
A	14.18	15.75	17.33
B	18.45	20.5	22.55
C	4.50	5.00	5.50
D	3.15	3.50	3.85
E	1.08	1.20	1.32
F	18.27	20.30	22.33
G	4.21	4.68	5.15
H	4.91	5.46	6.01

Simplified Diode Model(Per Leg)

Equivalent IV Curve for Model



Mathematical Equation

$$V_F = V_t + I_F \times R_{diff}$$

$V_t = -0.001 \times T_j + 0.99$ [V]

$R_{diff} = 3.64 \times 10^{-7} \times T_j^2 \quad 2.27 \times 10^{-5} \times T_j + 0.015$

Note:

Tj = Diode Junction Temperature In Degrees Celsius, valid from 25°C to 175°C

I_F= Forward Current

Less than 40A

1) Before using our products, please contact our marketing managers and get the latest specifications.

2) Ongoing efforts are being made to improve the reliability and quality of the products by CETC, but the semiconductors can malfunction due to various factors. Therefore, in order to prevent artificial damage or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-

the use of our products beyond the rating specified by CETC.

3) All the information contained in this document, such as the examples of application circuits, circuit constants, is provided only to illustrate the standard usage and operations of the products. The other relevant conditions must be taken into consideration when designing circuits for mass production.

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