

Product	SiC PM	Package	Case type
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## 1. Life Test

Test Item	Test Method/Standard	Test Condition	n [pcs]	Pn [pcs]
$\Delta T_j$ power cycle	$\Delta T_j = 100^\circ\text{C} \pm 5^\circ\text{C}$ , $T_j \leq 150^\circ\text{C}$ , $T_a = 25 \pm 5^\circ\text{C}$ EIAJ ED-4701/100-106	15000cyc	5	0
$\Delta T_c$ power cycle	$\Delta T_c = 50^\circ\text{C} \pm 5^\circ\text{C}$ , $T_j \leq 150^\circ\text{C}$ , $T_a = 25 \pm 5^\circ\text{C}$ EIAJ ED-4701/100-106	5000cyc	5	0
Temperature cycle	$-40^\circ\text{C}$ (60min)~RT(30min)~ $125^\circ\text{C}$ (60min)~RT(30min) EIAJ ED-4701/100-105	100cycle	5	0
Temperature humidity	$85^\circ\text{C}/85\%$ EIAJ ED-4701/100-103	1000h	5	0
High Temperature storage	$T_a = 150^\circ\text{C}$ EIAJ ED-4701/100-201	1000h	5	0
Low Temperature storage	$T_a = -40^\circ\text{C}$ EIAJ ED-4701/100-202	1000h	5	0
High temperature gate bias(+)	$V_{gs} = V_{GSS}(+)_{max}$ , $T_a = 150^\circ\text{C}$ JESD22-A108	1000h	5	0
High temperature gate bias(-)	$V_{gs} = V_{GSS}(-)_{max}$ , $T_a = 150^\circ\text{C}$ JESD22-A108	1000h	5	0
High temperature reverse bias	$V_{ds} = 960\text{V}$ , $V_{gs} = 0\text{V}$ , $T_a = 150^\circ\text{C}$ EIAJ ED-4701/100	1000h	5	0

## 2. Stress Test

Test Item	Test Method/Standard	Test Condition	n [pcs]	Pn [pcs]
Vibration	$10 \sim 500\text{Hz}/15\text{min}$ $100\text{m/s}^2$ Each X,Y,Z axis, EIAJ ED-4701/400-403 condition code B	6h (2h / direction)	5	0
Shock	$5000\text{m/s}^2$ pulse width 1msec Each X,Y,Z axis, EIAJ ED-4701/400-404 condition code B	3times / direction	5	0
Shock	$0 \overset{+5}{\underset{0}{}}$ (5min) $\sim$ $100 \overset{+0}{\underset{5}{}}$ (5min) EIAJ ED-4701/300-307 condition code A	10cyc	5	0
Terminal strength (Pull)	Pull force ; 40N(main terminal), 20N(signal terminal) EIAJ ED-4701/401- I	10sec	5	0
Terminal strength (Pull)	$3.5\text{N} \cdot \text{m}$ (M5) EIAJ ED-4701/402- II	10sec	5	0

Failure criteria : According to the electrical characteristics specified by the specification.