



Alloy: **DCE51**

Temper / Etat: O, H36, H38 and etc.,

Features: 1.5 times stronger than regular aluminum alloy. Similar strength with cold rolled steel sheet. Can replace SS for weight reduction.

Applications: Back covers for 3C products, automotive entertainment system, telecommunication devices and other weight sensitive portable equipment.

Mechanical Properties / Caracteristiques Mecaniques (0.1 mm):

Temper/Etat	Tensile Strength (Rm/Mpa)	Yield Strength (Rp0.2/Mpa)	Elongation %
O	308	155	22.3
H36	370	270	10.4
H38	394	292	10.1

Minimum Thickness / Epaisseur:

- ♦ 0.1 mm

Markets:

- ♦ Electronic devices, Telecommunication, Consuming electronic
- ♦ LCD/LED screen for laptop, monitor and automotive industry
- ♦ Aerospace/aircraft electrical equipment
- ♦ Replacement of Stainless Steel



## Comparison of Stainless Steel sheet and DCE51 sheet

	Stainless 304 1/2h 0.3mmt	→	DCE51-H38 0.3mmt	
<b>Weight</b> <small>0.3mmt X 70mm X 160mm</small>	26.6g	→	9g	<b>66% weight reduction</b>
<b>Thermal Conductivity</b>	16.6(W/(m*k))	→	117(W/(m*k))	<b>7X better thermal conductivity</b>
<b>Magnetism</b>	Possible Magnetic	→	Completely non-Magnetic	<b>Non-magnetic will not affect electrical signals</b>
<b>Price</b>	US\$.06/pc* <small>Reference Price US\$2.3/kg</small>	→	US\$.04/pc <small>Reference Price US\$4.5/kg</small>	<b>Price reduce</b> <small>*depends on SS price</small>
<b>Tensile Strength</b>	470 MPa	→	310 MPa	
<b>Elongation</b>	45%	→	12.1%	

