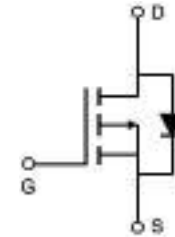
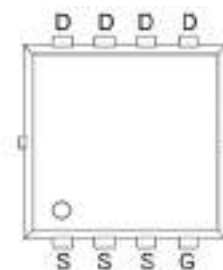
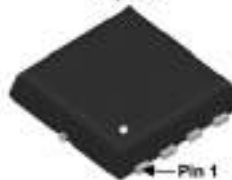



<p>Description</p> <p>The TCS1344P01 uses advanced trench technology to provide excellent $R_{DS(ON)}$ and low gate charge. It can be used in a wide variety of applications.</p> <p>General Features</p> <ul style="list-style-type: none"> • $V_{DS} = -30V, I_D = -44A$ $R_{DS(ON)}$ TYP $9m\Omega @ V_{GS}=-10V$ $R_{DS(ON)}$ TYP $14.7m\Omega @ V_{GS}=-4.5V$ • High Power and current handing capability • Lead free product is acquired • Surface Mount Package <p>Application</p> <ul style="list-style-type: none"> • DC-DC converter • Load switch • Power management 	 <p style="text-align: center;">Schematic diagram</p>  <p style="text-align: center;">pin assignment</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Top View</p>  <p>Pin 1</p> </div> <div style="text-align: center;"> <p>Bottom View</p>  <p>Pin 1</p> </div> </div> <p style="text-align: center;">PDFN3x3-8L</p>
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Absolute Maximum Ratings (TC=25°C unless otherwise noted)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current-Continuous	I_D	-44	A
Drain Current-Continuous (TC=70°C)	I_D	-35	A
Pulsed Drain Current (Note 1)	I_{DM}	-150	A
Maximum Power Dissipation	P_D	33.7	W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 To 150	°C

Thermal Characteristic

Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	3.7	°C/W
Thermal Resistance, Junction-to-Ambient (Note 2)	$R_{\theta JA}$	66	°C/W