

$V_{DS}$	<b>30V</b>
$R_{DS(ON)}$ (typ.)	<b>1.6m<math>\Omega</math></b>
$I_D$	<b>80A</b>
$P_D$	<b>100W</b>

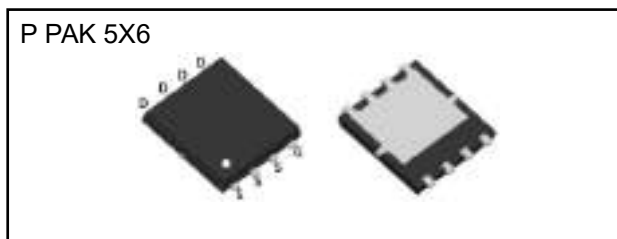
## Features

- 1、Low on – resistance
- 2、High power package (P PAK 5X6)
- 3、Pb-free lead plating ; RoHS compliant
- 4、Halogen free
- 5、100% Rg and UIS tested

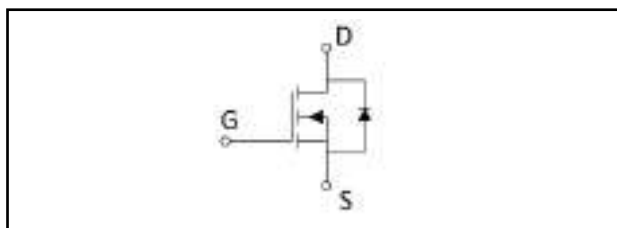
## Applications

Switching

### Outline



### Inner Circle



### Packaging specifications

Packing	Embossed Tape
Reel Size(mm)	330
Tape width(mm)	12
Basic ordering unit (pcs)	5000
Taping code	
Marking	TCS1380N01-DEFH

## Absolute maximum ratings (T<sub>c</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{DS}$	Drain-Source Voltage ( $V_{GS}=0V$ )	30	V
$V_{GS}$	Gate-Source Voltage ( $V_{GS}=0V$ ,static)	$\pm 20$	V
$I_D$	Continuous Drain Current (T <sub>c</sub> =25°C)	80	A
	Continuous Drain Current (T <sub>c</sub> =100°C)	56	A
$I_{DM}$	Pulesd Drain Current <sup>Note1</sup>	320	A
$I_{AS}$	Avalanche Current	32	A
$E_{AS}$	Single Pulsed Avalanche Energy <sup>Note5</sup>	77	mJ
$P_D$	Maximum Power Dissipation (T <sub>c</sub> =25°C)	100	W
	Power Dissipation – Derate above 25°C	3.0	W/°C
T <sub>J</sub> ,T <sub>STG</sub>	Operating,Storage Temperature Range	-55~150	°C

## Thermal Characteristics

Symbol	Parameter	Max.	Unit
$R_{\theta JA}$	Thermal Resistance,Junction-to-Ambient <sup>Note2</sup>	41.7	°C/ W
$R_{\theta JC}$	Thermal Resistance,Junction-to-Case	1.25	°C/ W