CoolSET F2 expands its family

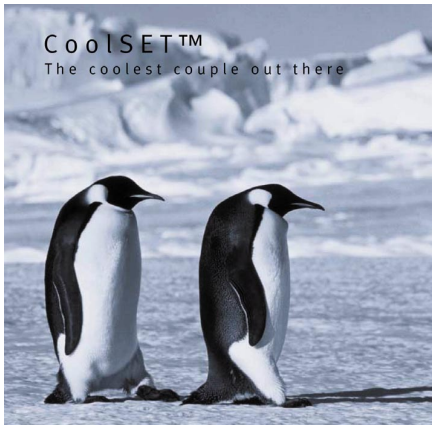
Now also available in TO-220-6 & DIP-7 !

Description:

Second generation of integrated Power ICs for switched mode power supplies (SMPS).

BY I N T EG R AT I N G a pulse width modulator control IC and CoolMOS™ power MOSFET into one package, CoolSET™ marks a new dimension in design agility and miniaturization. At the same time, the CoolSET family provides the highest output power with the lowest losses available in industry. CoolSET additionally integrates a very low power standby concept which reduces the power dissipation in standby mode.

N O W CoolSET is **also available with 67kHz** operating frequency - the ‚B' version. The CoolSET family is offered in **3 packages** broadening the **power range up to 180W** at wide range voltage input. Simultanously the **new packages** are with **improved creepage distance**.



Applications:

Switched Mode Power Supplies (SMPS) for:

- **Adapters**
  - Notebooks
  - Printers
  - LCD-Monitors

- **Battery Chargers for Portables**
  - Mobile Phones
  - Digital Still Cameras
  - Personal Digital Assistants / Organizers
  - Battery Operated Tools

- **Set-Top-Boxes**
- **Digital Video Disc Players / Recorders**

As well as Standby / Auxillary Power Supplies for:

- **PC**
- **White goods**
- **USB**

Features:

- **Integrated Power IC**
- **650V and 800V avalanche rugged CoolMOS™ technology**
- **Enhanced integrated protection functions**
- **Lowest standby power dissipation**
- **Modulated gate drive**
- **External current sense**
- **Packages DIP-8, DIP-7, TO-220-6**

Benefits:

- **Easier SMPS Design**
- **Reduced heat generation**
- **Reduced system cost, size and weight**
- **Less external components**
- **Comply with standby power requirements**
- **Reduced EMI**
- **Flexibility in current limitation**
- **Optimized fit for each application**
- **Increased creepage distance**

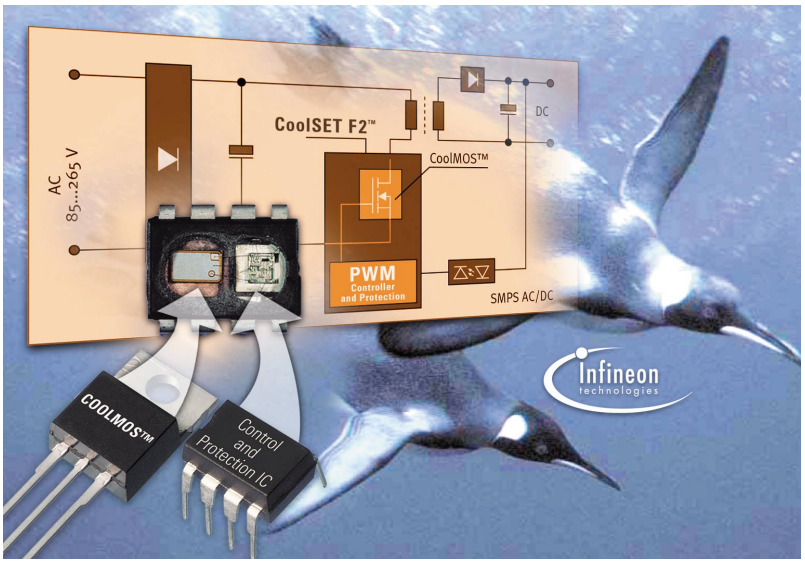
CoolSET F2

ICE2xxxxx series

www.infineon.com/coolset

Infineon technologies

Never stop thinking



Typical Application Example:
AC/DC Flyback Converter

V_{DS} [V]	f_{OPER} [kHz]	Type	$R_{DS(on)}$ [Ω]	$P_{OUT(max.)}$ [W] 1)	Package
650	100	ICE2A0565	6.0	15	P-DIP-8-6
		ICE2A0565Z	6.0	13	P-DIP-7-1
		ICE2A165	3.0	21	P-DIP-8-6
		ICE2A265	1.0	34	P-DIP-8-6
		ICE2A365	0.5	47	P-DIP-8-6
650	67	ICE2B165	3.0	21	P-DIP-8-6
		ICE2B265	1.0	34	P-DIP-8-6
		ICE2B365	0.5	47	P-DIP-8-6
800	100	ICE2A180	3.0	21	P-DIP-8-6
		ICE2A280	0.8	37	P-DIP-8-6
		ICE2A180Z	3.0	19	P-DIP-7-1
		ICE2A280Z	0.8	33	P-DIP-7-1

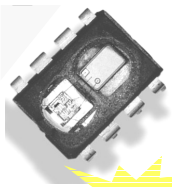
V_{DS} [V]	f_{OPER} [kHz]	Type	$R_{DS(on)}$ [Ω]	$P_{OUT(max.)}$ [W] 2)	Package
650	100	ICE2A765P	0.5	180	P-TO220-6 ISO
650	67	ICE2B765P	0.5	180	P-TO220-6 ISO

1) R_{th}=56k/W (~6cm² copper area), T_a=50°C, T_j=125°C, V_{in}=85V...270V

2) R_{th}=2,7k/W, T_a=50°C, T_j=125°C,V_{in}=85V...270V

P-DIP-8

- Pout ~10...45W
- standard DIP8 package

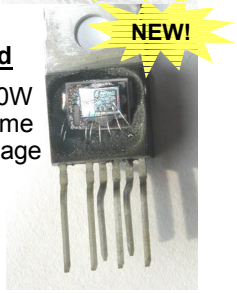


P-DIP-7

- Pout ~10...35W
- increased cree-page distance

TO-220-6 Isolated

- Pout ~50W...200W
- isolated lead frame
- increased creepage distance



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