5 é / Descriptions

TO-252 .> / / x 6 ?ú 3 « | • ’ož

P-CHANNEL MOSFET in a TO-252 Plastic Package.

¤ ª / Features

V_{DS} (V) = -60V I_D =-20A (V_{GS} = f 20V)

$R_{DS(ON)}$@-10V 0 S S : _ V S S

8* 9 5 4 & < ‡ S S : _ V S S

… ` ' +) 7 ö Õ ä U ´ Å } L k —)í D }ož

Qualified to AEC-Q101 Standards for High Reliability, HF Product.

Ð ÷ / Applications

9 z 9 è ò y V ñ èo• *) *) ô Eo• Ž ` ” D } › ä | ô E k á V ñ • } Lož

Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products, Meet the stringent requirements of automotive applications.

Ã W] Ô · / Equivalent Circuit

• Û - æ / Pinning

PIN1 y G PIN 2 y D PIN 3 y S PIN 4 y D

, M V / Marking

• - ~ ª ¢ož

See Marking Instructions.

@ *f* Parameter	… Z Symbol	*f* › Rating	% y Unit
Drain-Source Voltage	V_{DSS}	-60	V
Gate-Source Voltage	V_{GSS}	±20	V
Continuous Drain Current	I_D (T_I=25°C)	-20	A
Pulsed Drain Current	I_{DM}	-80	A
Avalanche Current	I_{AS}	-13.8	A
Avalanche energy L=0.5mH	E_{AS}	95	mJ

@ *f* Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › Typ	Â Ý › Max	% y Unit
Turn-on Delay Time	$t_{d(ON)}$	V_{GS}=-10V V_{DS}=-30V R_L=7.5 R_{GEN}=3		8		ns
Turn-on Rise Time	t_r			3.8		
Turn-off Delay Time	$t_{d(OFF)}$			31.5		

Ô ? d • Ž ¢ / Electrical Characteristic Curve

Ô ? d • Ž ¢ / Electrical Characteristic Curve

Ø ¤ =) ¢ / Package Dimensions

, M y ƒ / Marking Instructions

BR Q
20P06
****

ª ¢ y

BR y ¸ [W A

Q y V ñ —)í D } ö œ

20P06 y º Z W A

y ÿ D Z W A k š ÿ D Z J

Note:

BR:	Company Code
Q:	Automobile halogen-free product Code
20P06:	Product Type Code
****:	Lot No. Code, code change with Lot No

š WD t … • Ž ¢ (x /) / : K S V K X G Z [X K 6 X U L O R K L U X / 8 8 K L R U] 9 U R J K X O T M 6

ª ¢ y Note:

1o• Ä ½ “ † 150 ½200 - k ž • 60 ½120sec; 1.Preheating:150~200 - , Time:60~120sec.

2o• Q › “ † 255 r5 - k ž • 4 Ò 5 r0.5sec; 2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.

3o•D N ò i Ò 0 , † 2 ½10 - /sec. 3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 - ž • y 10 r1 sec. Temp.:260±5 Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL