

# BRCS350P04DP

Rev.B Oct.-2024

## 5 é / Descriptions

TO-252 .> // x 6 ?ú 3 « | •'ož

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

## ¤ ¢ / Features

$V_{DS} (V) = -40V$   $I_D = -27.5 A$  ( $V_{GS} = f 20V$ )

$R_{DS(ON)}@10V 0.35mR$ (Typ.33mR)

$R_{DS(ON)}@4.5V 0.60mR$ (Typ.40mR)

—)í D } ÄHF Product.

## Ð ÷ / Applications

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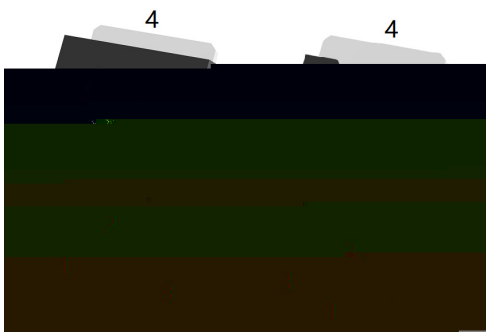
Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products.

## Ã W] Ô . / Equivalent Circuit

\_\_\_\_\_ o D \_\_\_\_\_



## • Ũ - æ / Pinning



PIN 1 y G

PIN 2 y D

PIN 3 y S

PIN 4 y D

## , M V / Marking

• - ~ ¢ ož

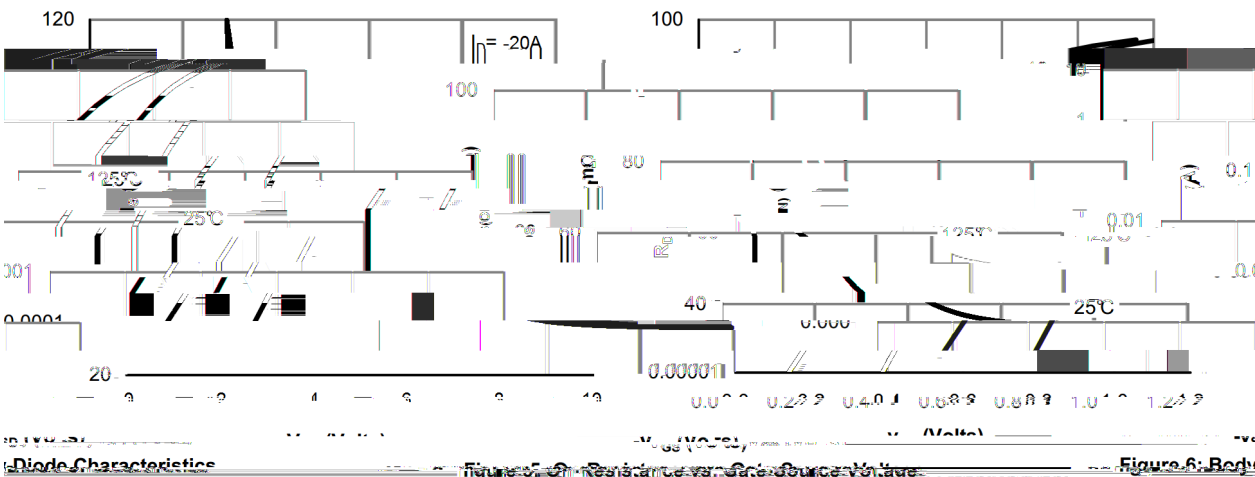
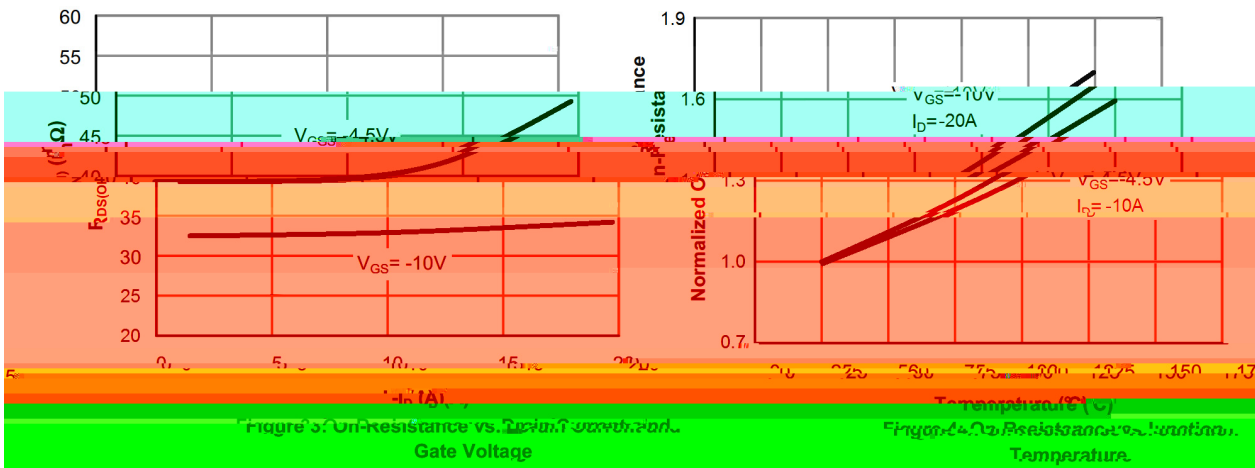
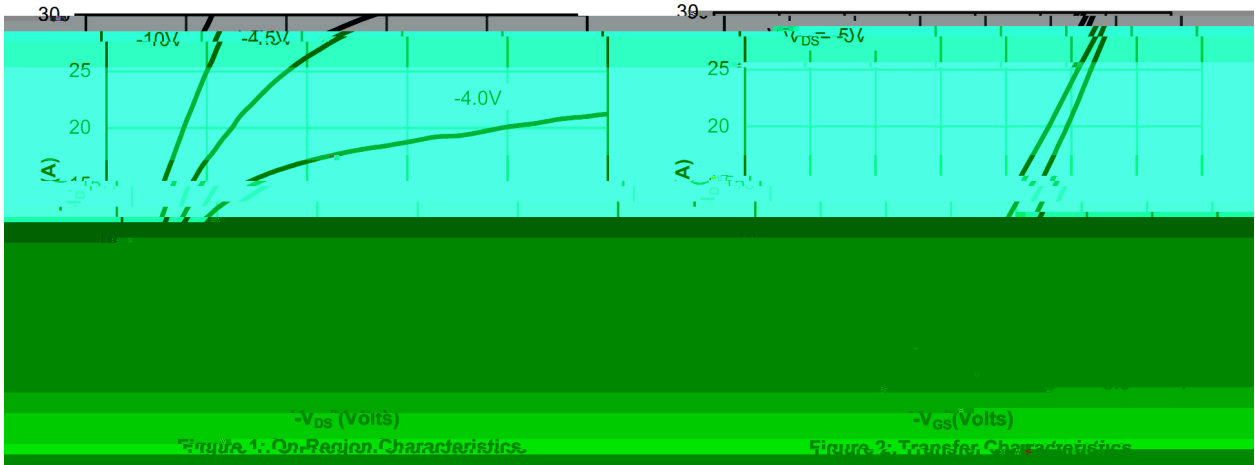
See Marking Instructions.

@ f Parameter	... Z Symbol	f › Rating	% y Unit
Drain-Source Voltage	V <sub>DSS</sub>	-40	V
Drain Current	I <sub>D</sub> (T <sub>c</sub> =25 )	-27.5	A
Drain Current - Pulsed	I <sub>DM</sub>	-87	A
Gate-Source Voltage	V <sub>GS</sub>	±20	V
Avalanche Current	I <sub>AS</sub>	13	A
Single Pulsed Avalanche Energy $\Delta L=0.5\text{mH}$ $\Delta$	E <sub>AS</sub>	54	Pow

-1Dissip4

@ f Parameter	... Z Symbol	y j Ú ^ Test Conditions	Â 4 › Min	Á ° › Typ	Â Ý › Max	% y Unit
Turn-On Delay Time	t <sub>d(on)</sub>	V <sub>GS</sub> =-10V V <sub>DS</sub> =-20V R <sub>L</sub> =1.6 j R <sub>GEN</sub> =3		2.09	0	Tc <006-d

Electrical Characteristic Curve



Electrical Characteristic Curve

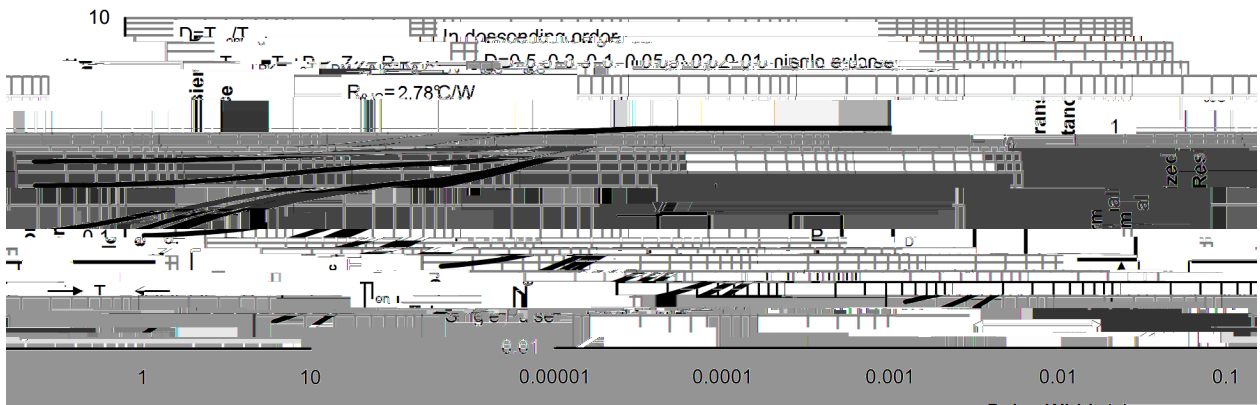
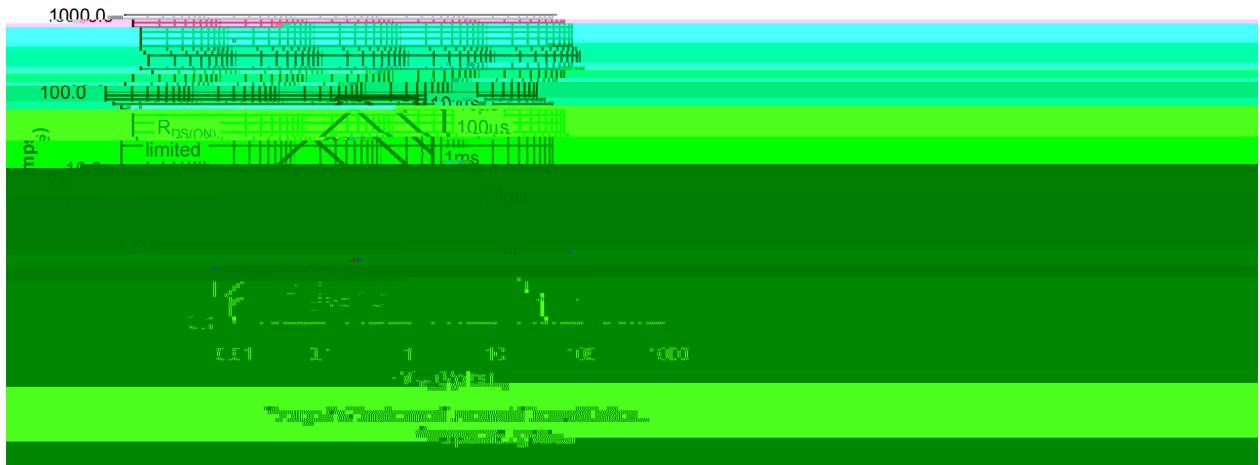
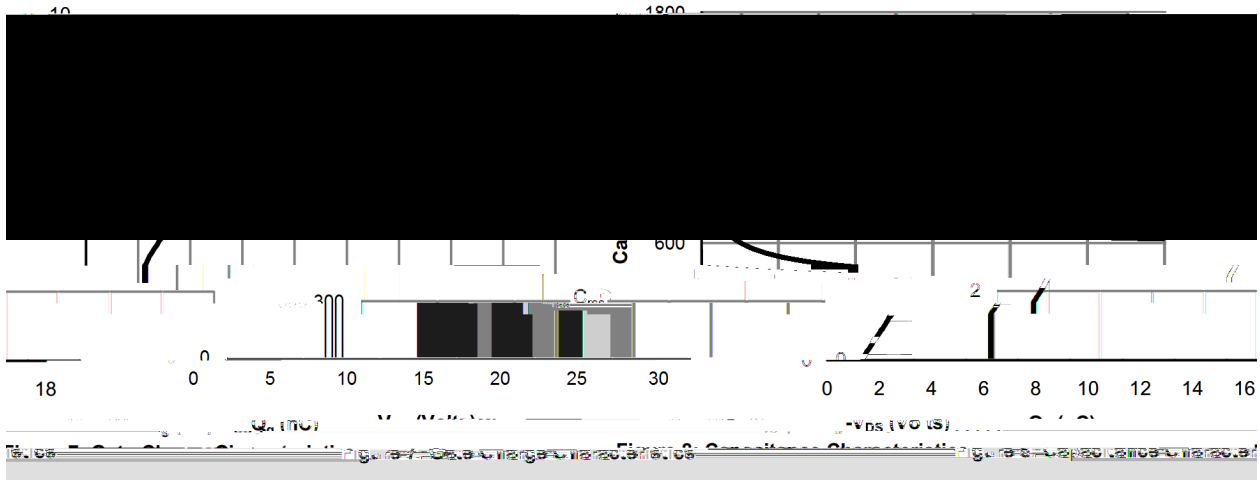
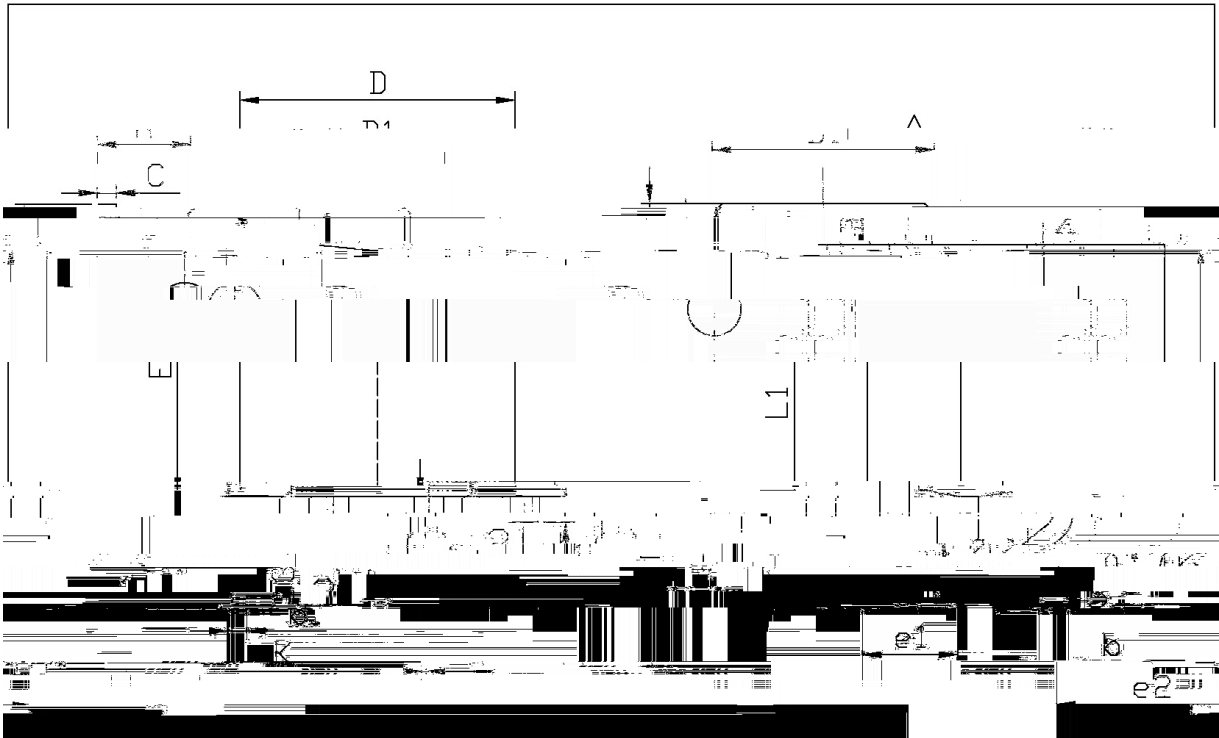


Figure 10: Normalized Maximum Transient Thermal Impedance

∅ □ = ) ∅ / Package Dimensions

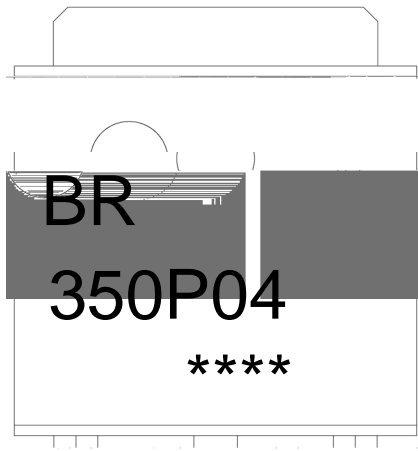


单位: mm

Symbol	Min	Max	Symbol	Min
A	2.30	2.40	E	5.95
B	0.50	0.55	e1	4.75
C	0.45	0.55	e2	9.95
D	5.16	5.50		
D1	5.16	5.50		

12-252

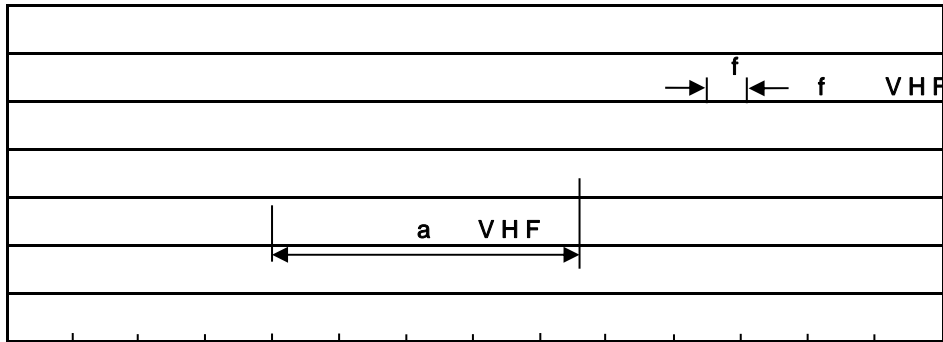
, M y f / Marking Instructions



<sup>a</sup> ç y  
BR y                   , [ W A  
350P04 y               ° Z W A  
                          y               ÿ D Z W A k š ÿ D Z J

Note:  
BR:                   Company Code  
350P04:            Product Type Code  
\*\*\*\*:                Lot No. Code, code change with Lot No

šWD t...•Žç (x/ ) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6



<sup>a</sup>çy

- 1o• Ä ½ “ † 150 ½180 - k ž • 60 ½90sec;
- 2o• Q › “ † 245 r5 - k ž • 4 Ò 5 r0.5sec;
- 3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

- 1.Preheating:150~180 - , Time:60~90sec.
- 2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.
- 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

Package Type 7>û ~ E	Units ;>û iH					Dimension ;>û p . (unit Åmm³)		
	Units/Reel / - -	Reels/Inner Box - - / -	Units/Inner Box / -	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç
TO-252	2,500	2	5,000	6	30,000	13 s ×16	360×360×50	380×335×366

ì ' x / TUBE

Package Type 7>û ~ E	Units ;>û iH					Dimension ;>û p . (unit Åmm³)		
	Units/Tube / •1x	Tubes/Inner Box •1x / -	Units/Inner Box / -	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Tube •1x	Inner Box	Outer Boxç
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

„ Æ y f / Notices