

# BRCS350P04SC

Rev.A Sep.-2024

## / Descriptions

SOP-8          P          MOS

P-Channel Enhancement Mode Field Effect Transistor in a SOP-8 Plastic Package.

## / Features

$V_{DS} (V) = -40V$        $I_D = -6.8A (V_{GS} = \pm 20V)$

$R_{DS(ON)}@-10V$  35m (Typ.33m )

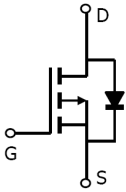
$R_{DS(ON)}@-4.5V$  60m (Typ.40m )

HF Product.

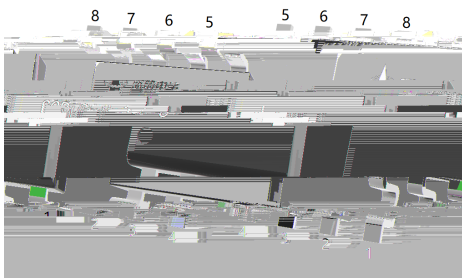
## / Applications

Power Management in Notebook computer, Portable Equipment and Battery powered systems.

## / Equivalent Circuit



## / Pinning



PIN 1	S	PIN 2	S	PIN 3	S	PIN 4	G
PIN 5	D	PIN 6	D	PIN 7	D	PIN 8	D

## / Marking

See Marking Instructions.

# BRCS350P04SC

Rev.A Sep.-2024



DATA SHEET

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DSS}$	-40	V
Drain Current	$I_D$	-6.8	A
Drain Current - Pulsed	$I_{DM}$	-30	A
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Avalanche Current	$I_{AS}$	13	A
Single Pulsed Avalanche Energy $L=0.5mH$	$E_{AS}$	54	mJ
Power Dissipation	$P_D$	2.7	W
Storage Temperature Range	$T_{stg}$	-55 150	
Thermal Resistance-Junction to Ambient	$t$ 10s	$R_{JA}$	46
	Steady-State		80

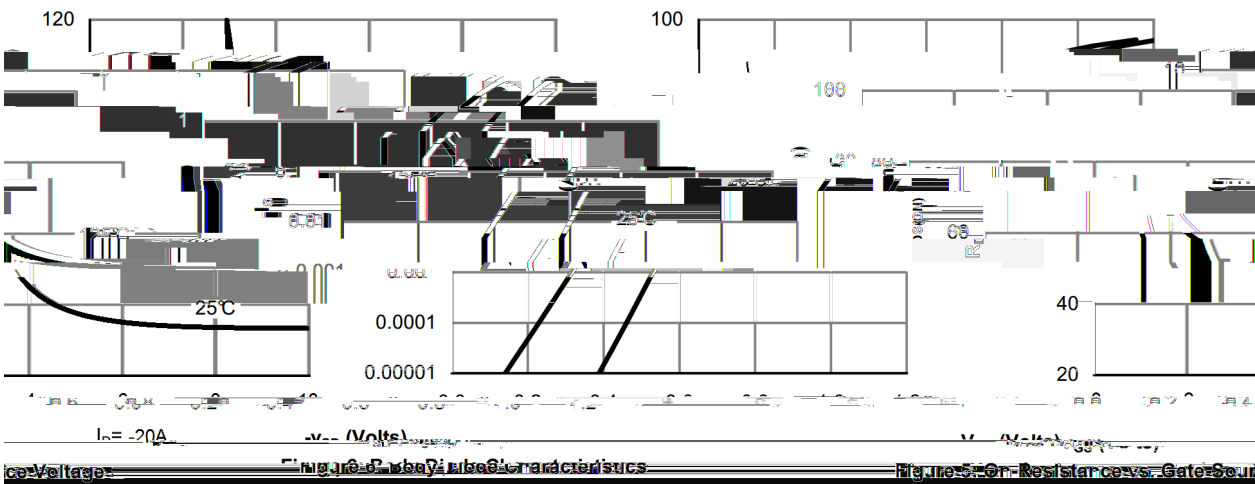
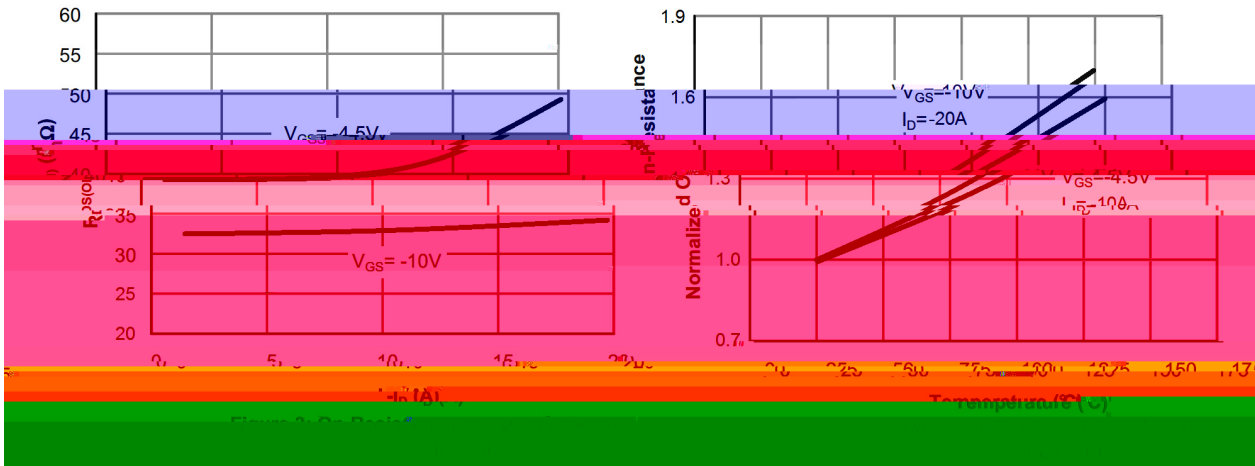
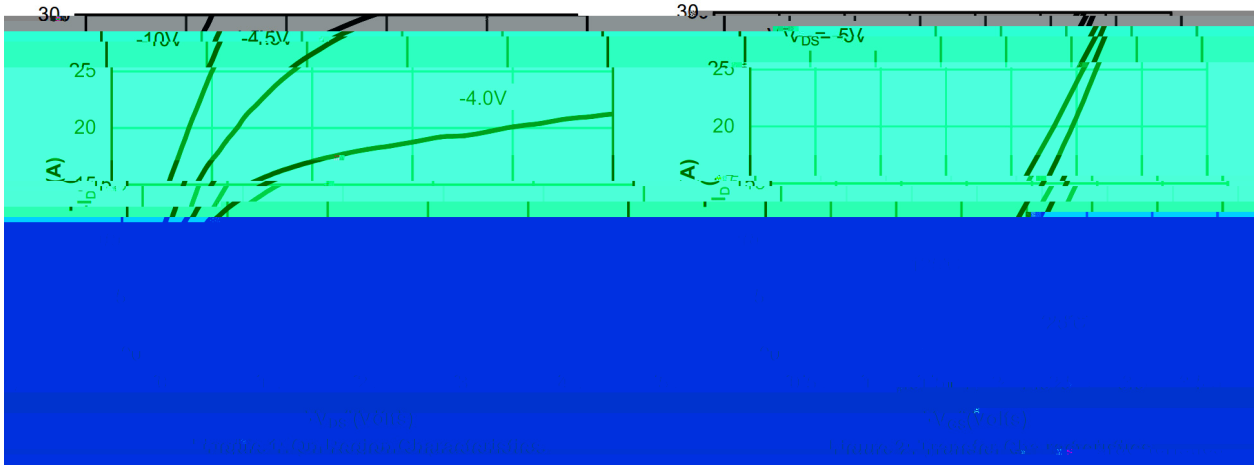
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V$ $I_D=-250$ A	-40	-46		V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=-40V$ $V_{GS}=0V$			1.0	A
Gate-Body Leakage Current Forward	$I_{GSS}$	$V_{GS}=\pm 20V$ $V_{DS}=0V$			$\pm 0.1$	A
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250$ A	-1.0	-1.4	-2.5	V

Static Drain-Source  
On-Resistance

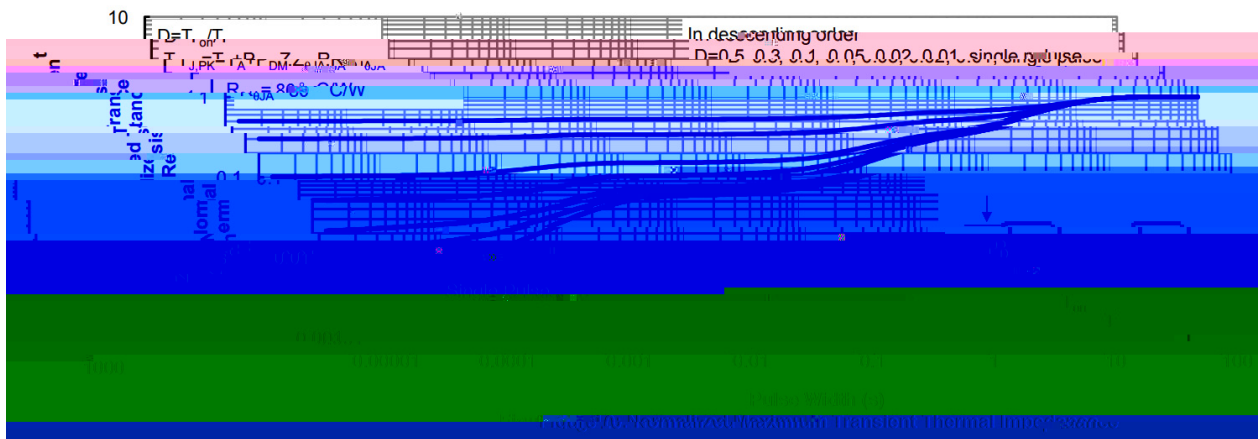
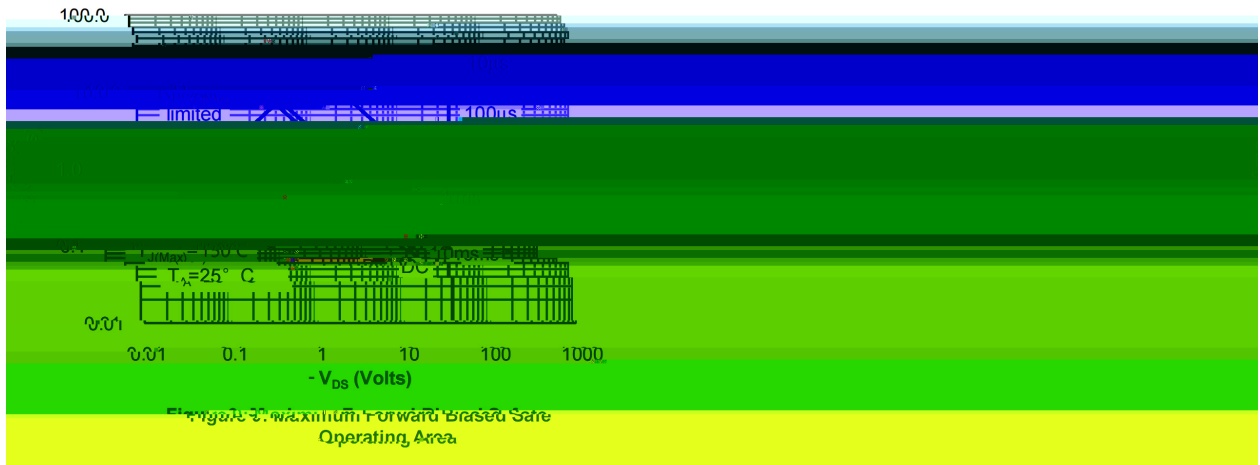
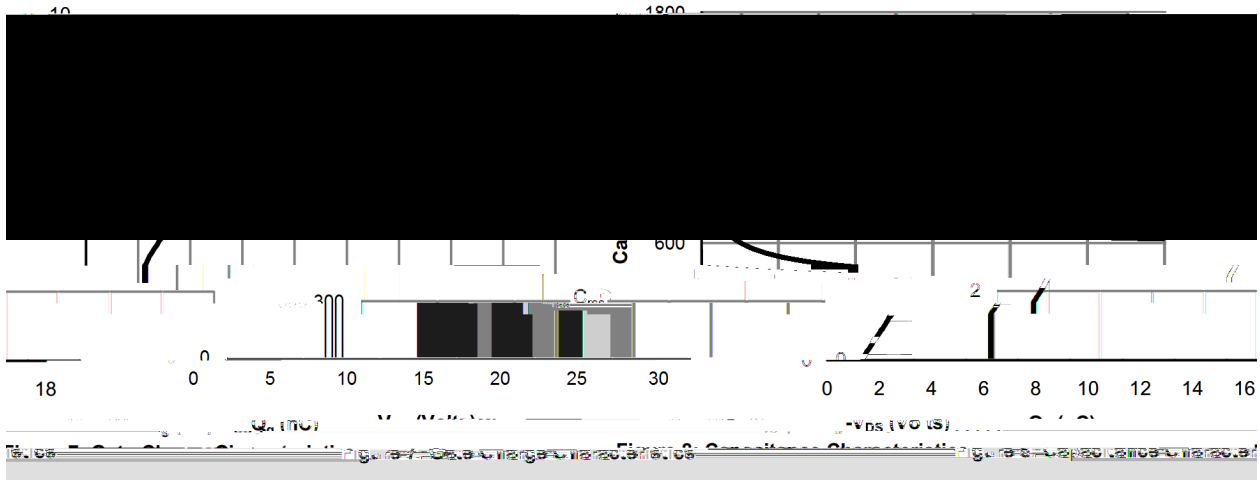
$R_{10s}$  58.7404  $T_{m0}$   $T_{c0}$   $T_{w(D)}$   $T_{j10}$  0.4958 498 r47998 18.0  $T_c$  433603  $T_m$  371470  $T_c$  2.-20A  $\theta_{JA}$  2.192f5(33195 =0V

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	t					

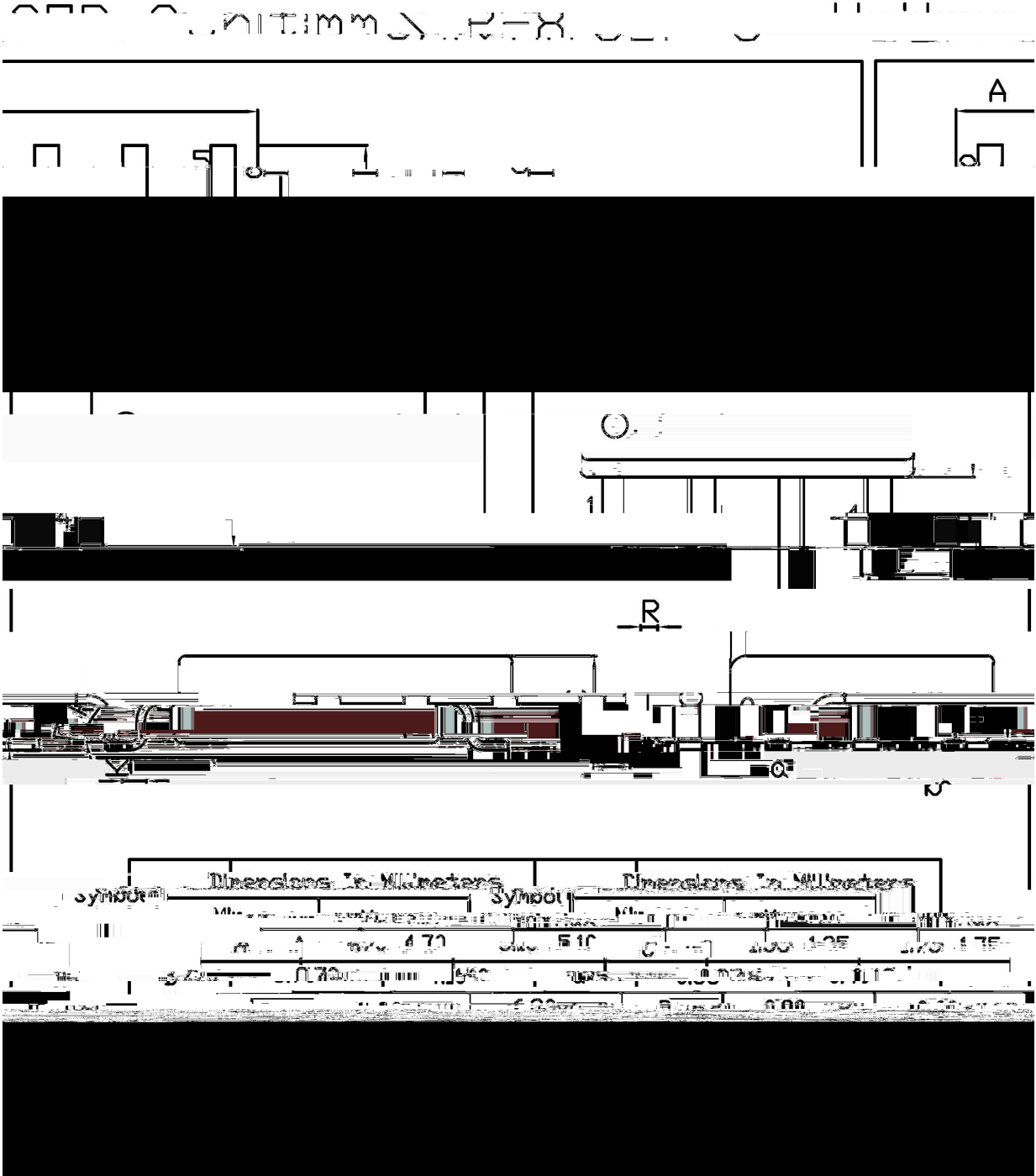
/ Electrical Characteristic Curve

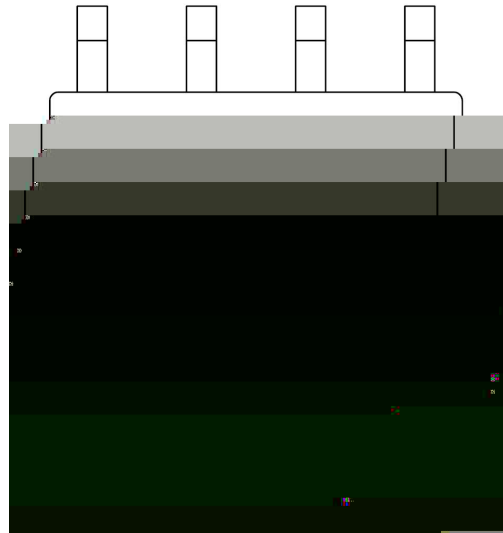


/ Electrical Characteristic Curve



**/ Package Dimensions**





**( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)**


**Note:**

- |   |         |           |                                         |
|---|---------|-----------|-----------------------------------------|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180 , Time:60~90sec.   |
| 2 | 245±5   | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | 2 10    | /sec.     | 3. Cooling Speed: 2~10 /sec.            |

**/ Resistance to Soldering Heat Test Conditions**

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec
-------	-----------	-------------	---------------

**/ Packaging SPEC.**

/ REEL

Package Type	Units	Dimension	(unit mm <sup>3</sup> )
--------------	-------	-----------	-------------------------