

BRCS500P10DP

Rev.A Aug.-2023

/ Descriptions

TO-252 P MOS

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

/ Features

$V_{DS}(V)=-100V$ $I_D=-28A$

$R_{DS(ON)}@-10V<50m\Omega$ (Typ.42mR)

$R_{DS(ON)}@-4.5V<55m\Omega$ (Typ.45mR)

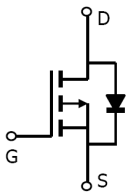
HF Product.

/ Applications

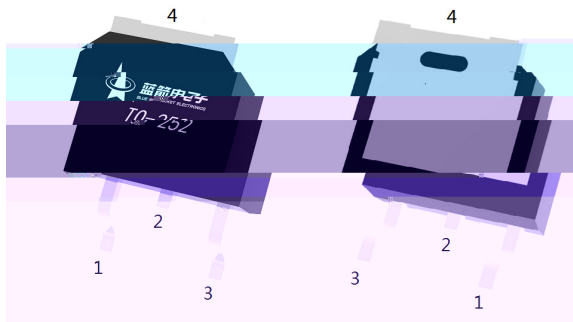
DC/DC

Power Management of Industrial DC/DC Converter.

/ Equivalent Circuit



/ Pinning



PIN1 G

PIN 2 D

PIN 3 S

PIN 4 D

/ Marking

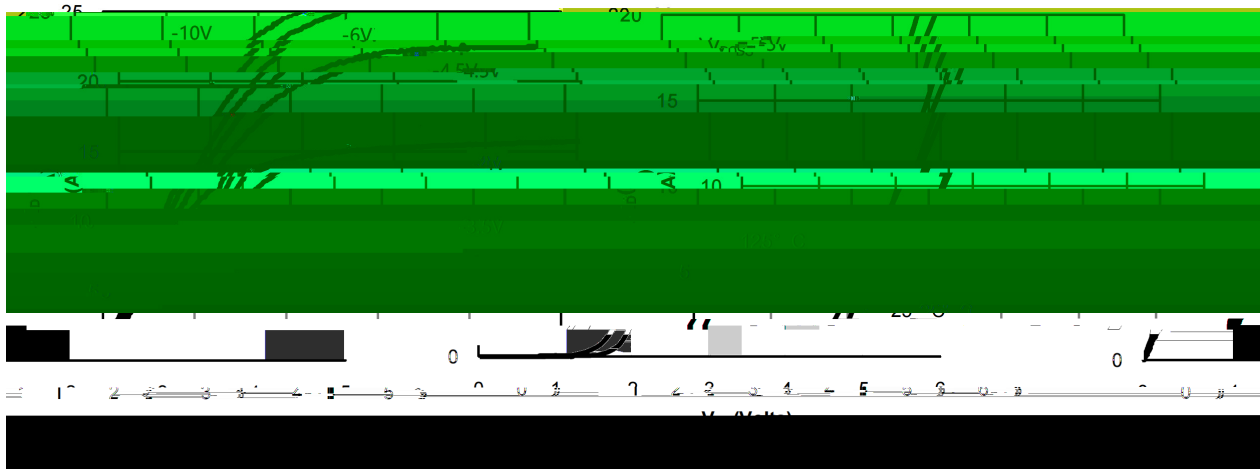
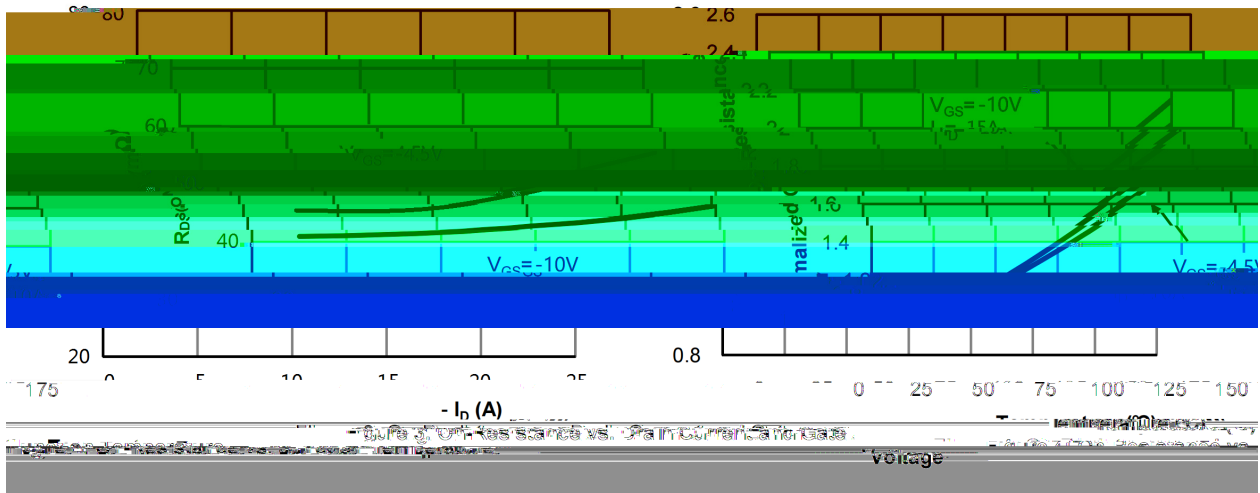
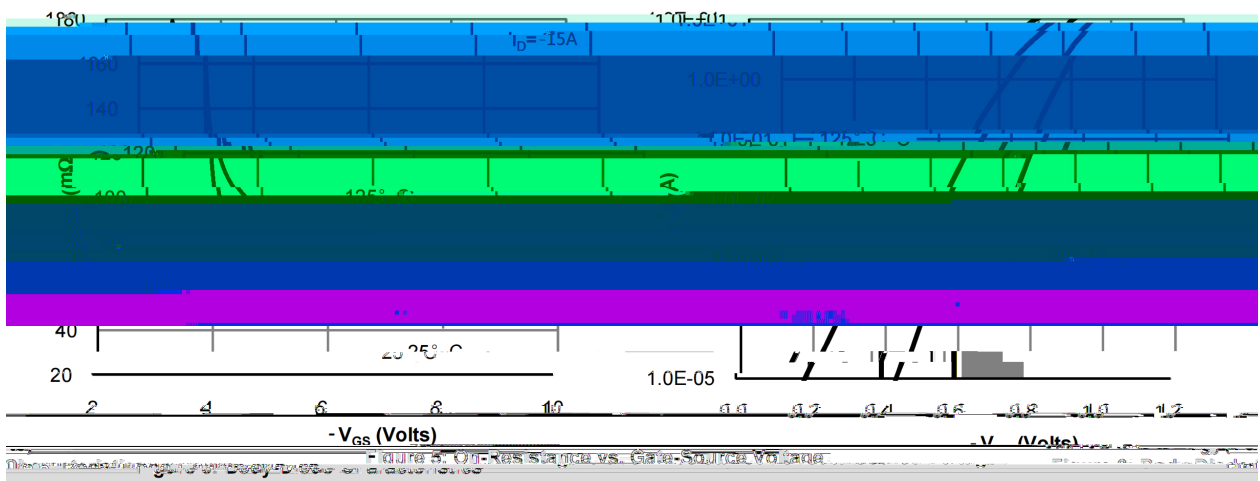
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V		


/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=-10V$ $V_{DS}=-50V$ $R_L=10\Omega$ $R_{GEN}=3\Omega$		6		ns
Turn-On Rise Time	t_r			2.4		
Turn-Off Delay Time	$t_{d(off)}$			19		
Turn-Off Fall Time	t_f			2.6		

/ Electrical Characteristic Curve



/ Electrical Characteristic Curve

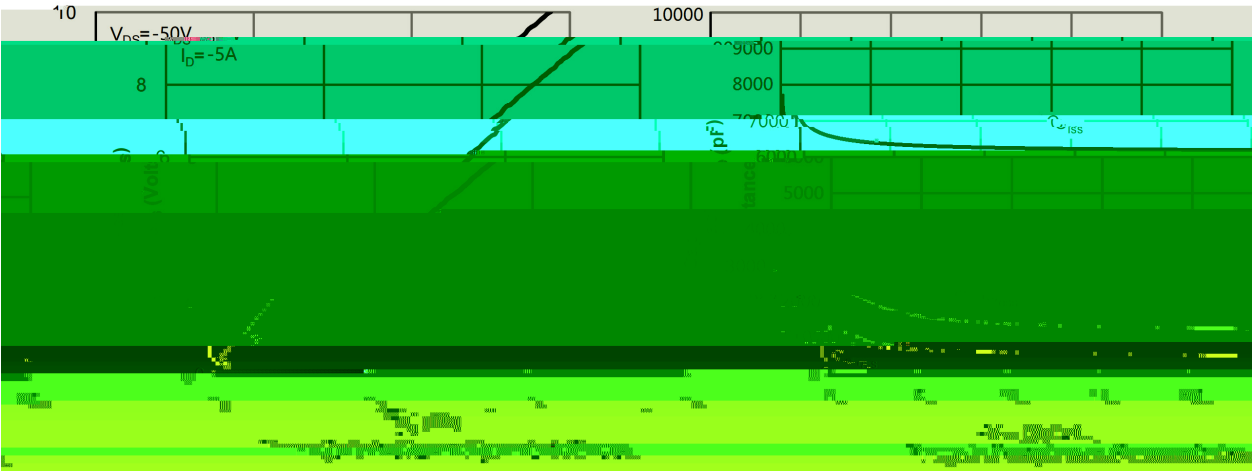
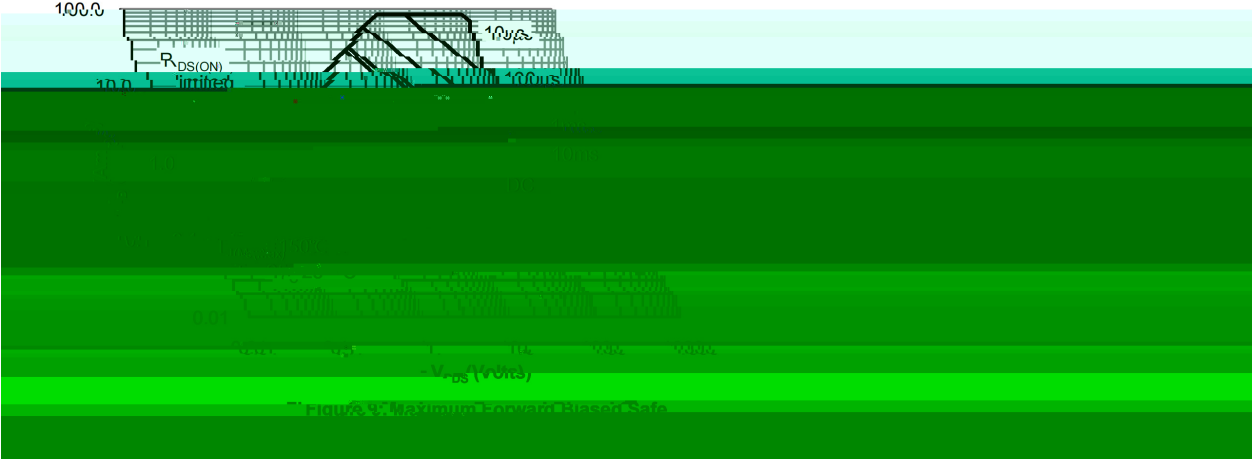
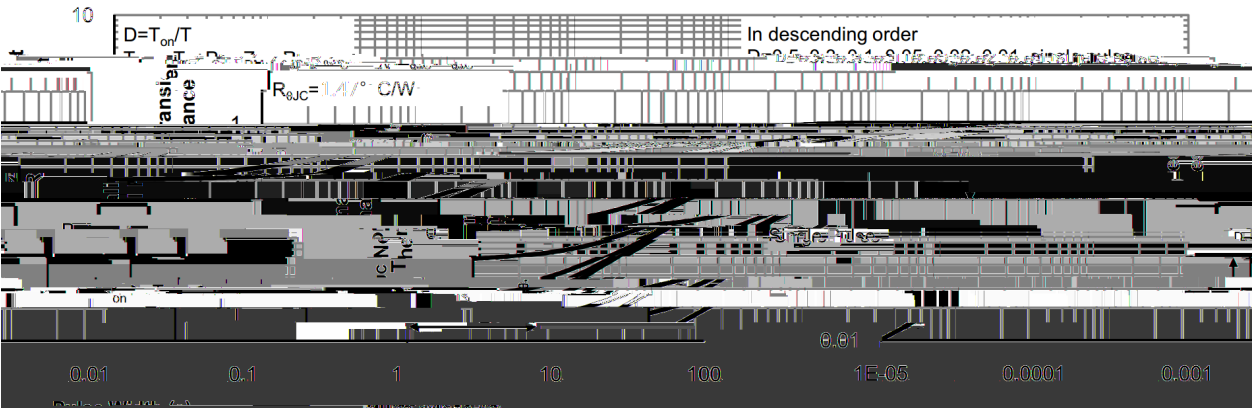
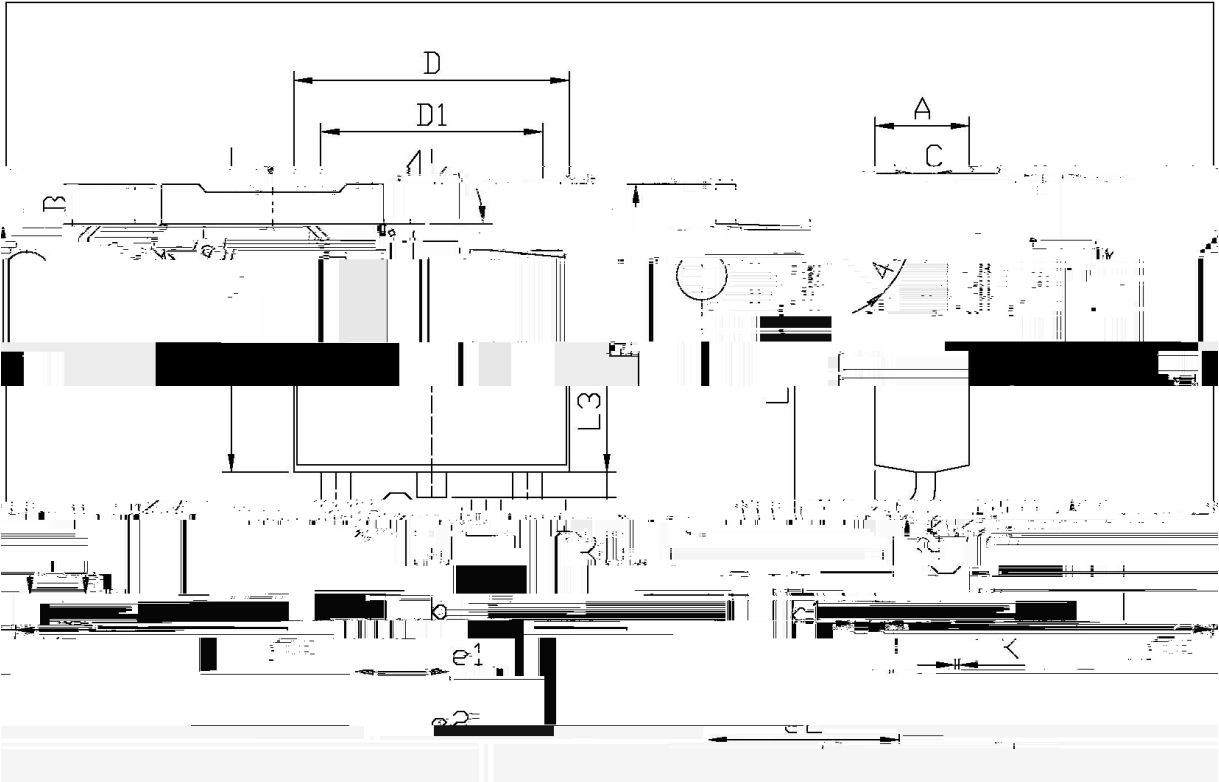


Figure10: Normalized Maximum Transient Thermal Impedance

I Package Dimensions



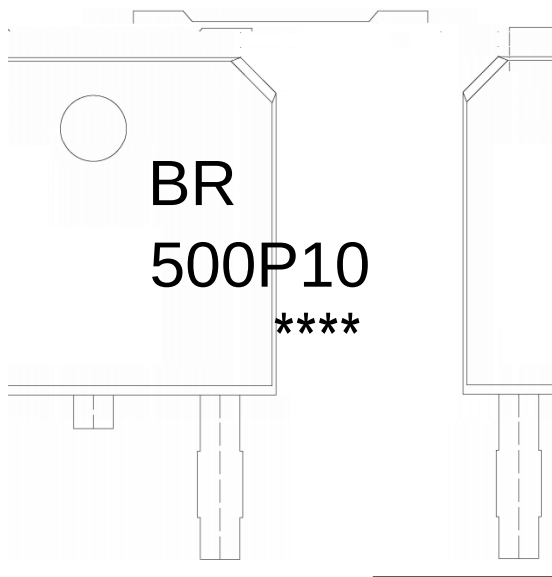
单位: mm

Dimensions, Millimeters		Dimensions, Inches	
Min	Max	Min	Max
2.24	2.34	0.088	0.092
0.85	0.95	0.033	0.037
0.45	0.55	0.018	0.022
6.45	6.75	0.254	0.268
5.10	5.50	0.201	0.217
0.40	0.50	0.016	0.020

TD-252



/ Marking Instructions



BR

500P10

Note:

BR: Company Code

500P10: Product Type

****: Lot No. Code, code change with Lot No

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