



/ Descriptions

SOP-8

MOS

Complementary Enhancement MOSFET in a SOP-8 Plastic Package.

/ Features

N-channel

P-channel

$V_{DS}(V)=40V$

$V_{DS}(V)=-40V$

$I_D=8A(T_C=25^\circ C)$

$I_D=-7A(T_C=25^\circ C)$

$I_{JFEZ3}, d \Delta M_{J4}(' M\%$

$I_{JFEZ3}^*, d \Delta M_{J4}(\$' M\%$

$I_{JFEZ3+}, d \Delta M_{J4}+%M\%$

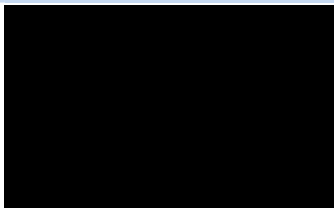
$I_{JFEZ3-} d \Delta M_{J4} \$+%M\%$

HF Product.

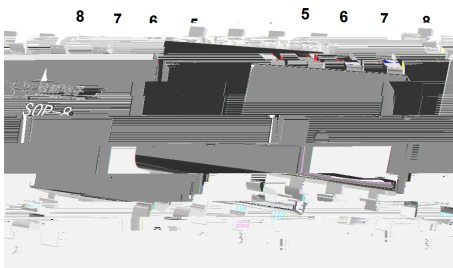
/ Applications

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies. And suitable for use as a load switch or in PWM applications.

/ Equivalent Circuit



/ Pinning



PIN 1	S1	PIN 2	G1	PIN 3	S2	PIN 4	G2
PIN 5	D2	PIN 6	D2	PIN 7	D1	PIN 8	D1

/ Marking

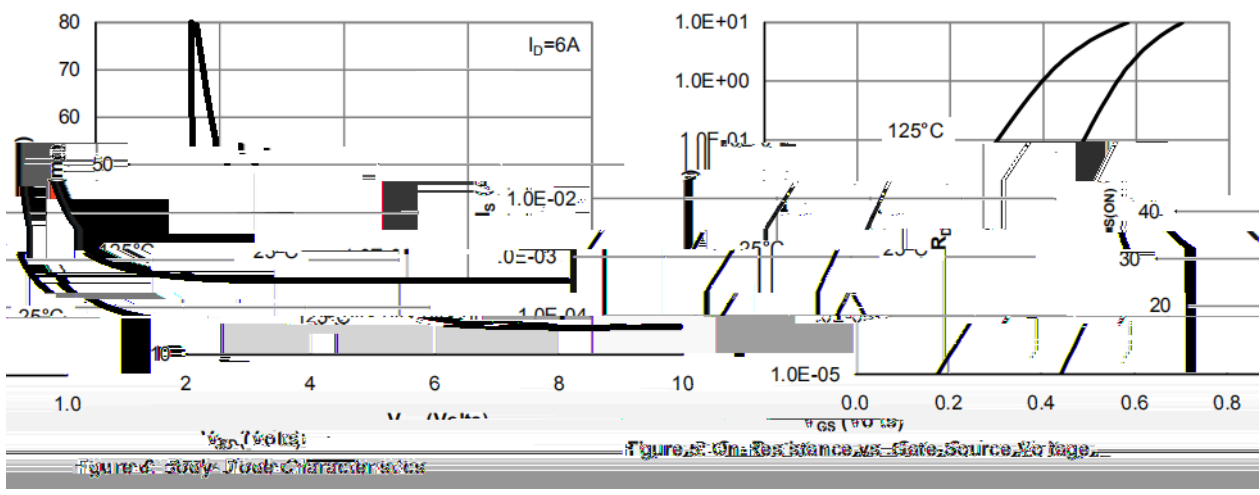
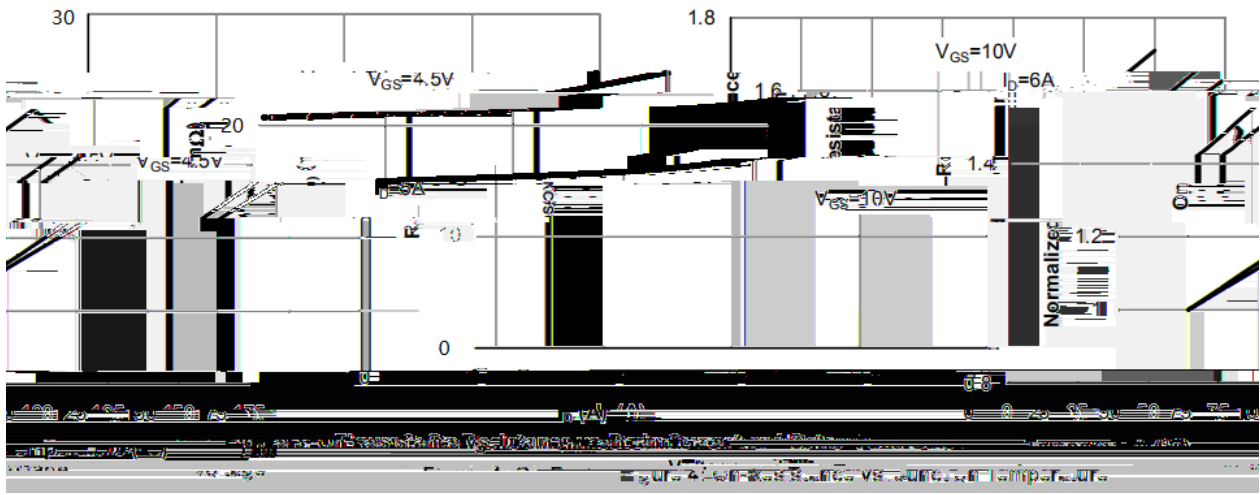
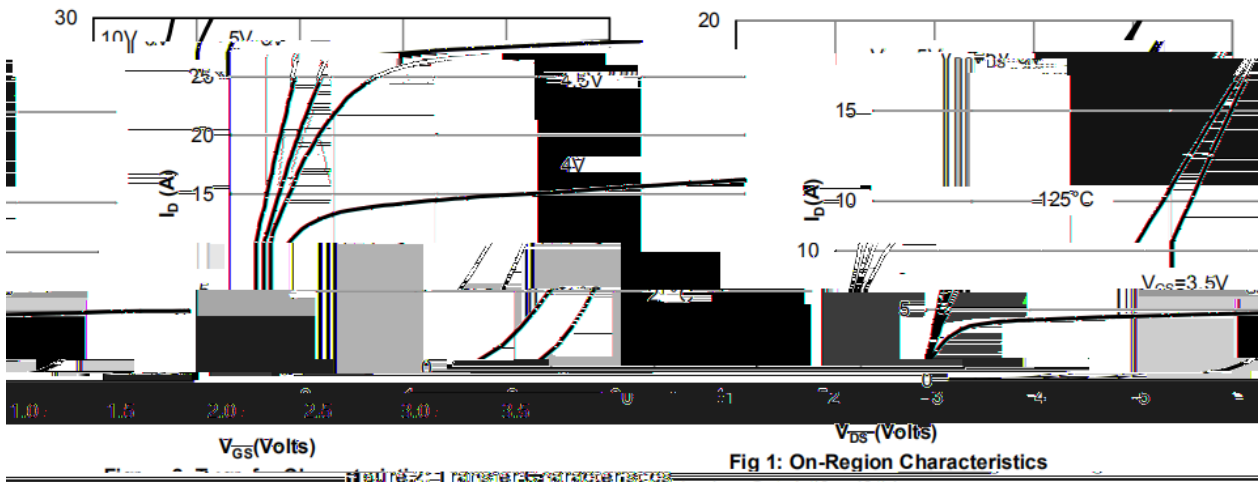
See Marking Instructions.

/ Absolute Maximum Ratings($T_a=25$)

Parameter	Symbol	Rating		Unit
		N-channel	P-channel	
Drain-Source Voltage	V_{DSS}	40	-40	V
Gate-Source Voltage	V_{GSS}	± 20		V
Continuous Drain Current	$I_D(T_C=25)$	8	-7	A
Continuous Drain Current	$I_D(T_A=25)$	6	-5	A
Pulsed Drain Current	I_{DM}	20	-20	A
Power Dissipation	$P_D(T_C=25)$	3.5	3.5	W
Power Dissipation	$P_D(T_A=25)$	2	2	W
Maximum Junction-to-Ambient	R_{JA}	$t \leq 10s$	62.5	/W
	R_{JA}	Steady-State	110	/W
Maximum Junction-to-Case	R_{JC}	Steady-State	35.7	/W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150		

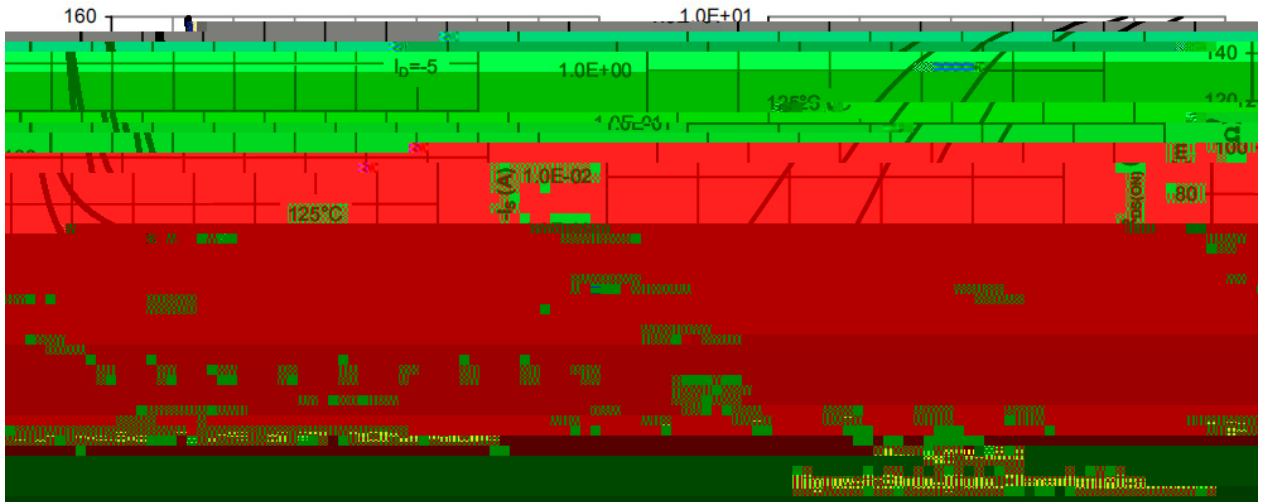
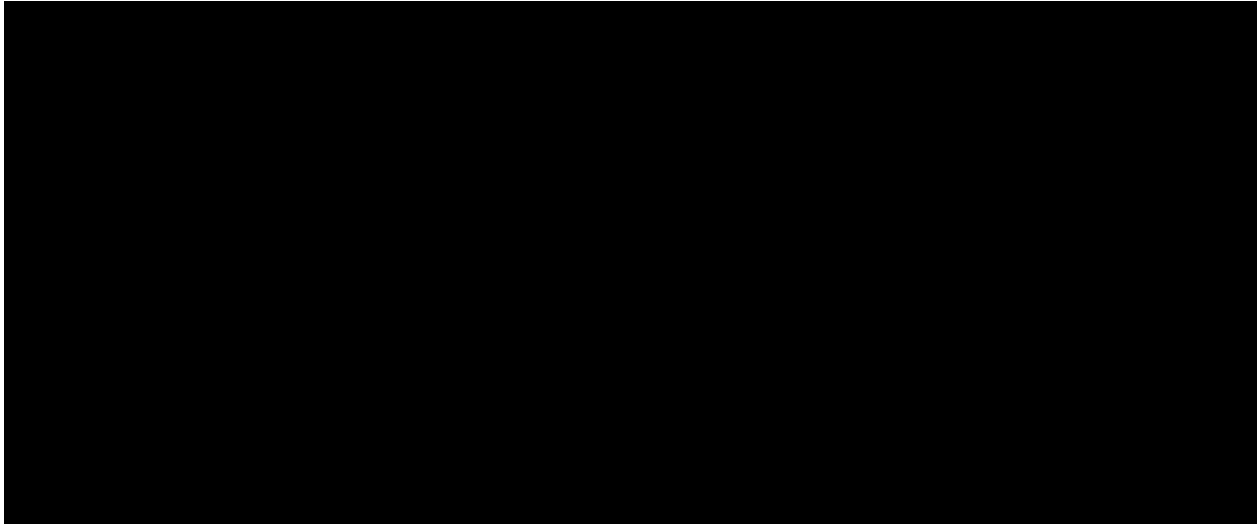
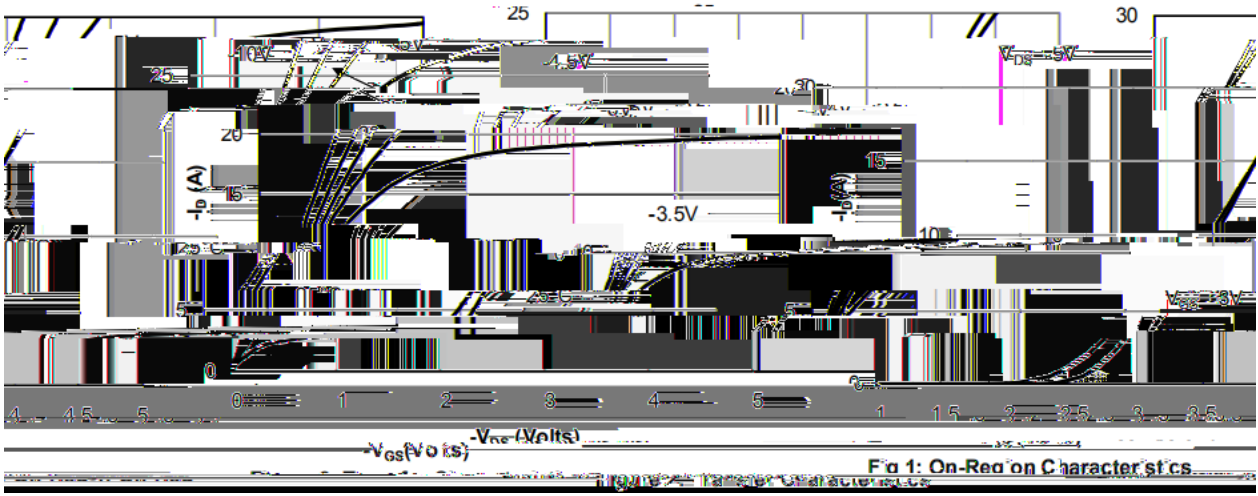
BRCS4614SC

N / N-CHANNEL Electrical Characteristic Curve

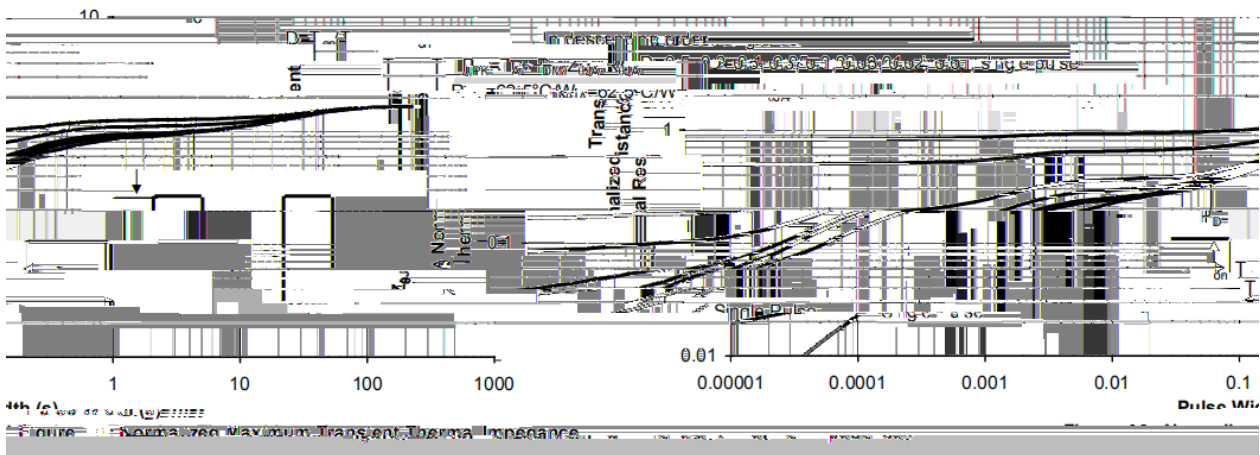
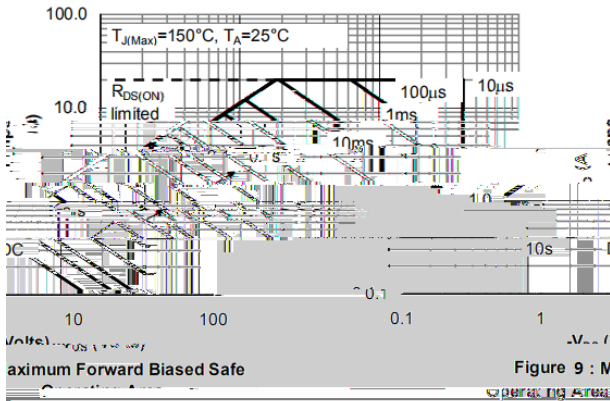
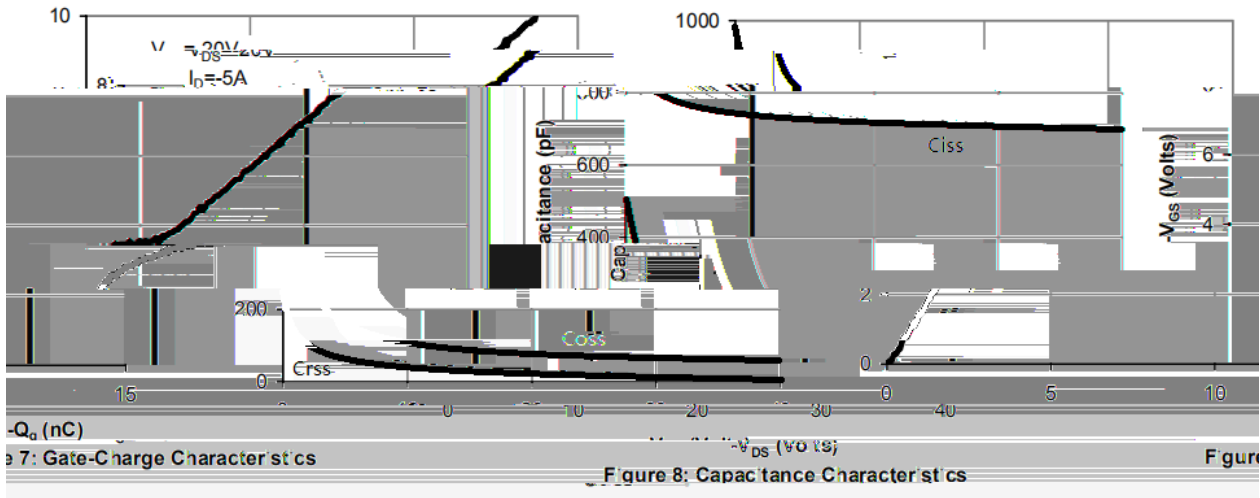


Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=-250\mu A$	-40	-46		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-40V$ $V_{GS}=0V$			-1.0	μA
		$V_{DS}=-40V$ $V_{GS}=0V$ $T_J=55$			-5.0	μA
Gate-Body leakage current	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250\mu A$	-1.4	-1.6	-3.0	V
On state drain current	$I_{D(on)}$	$V_{DS}=-5V$ $V_{GS}=-10V$	6			A
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=-10V$ $I_D=-5.0A$		32	35	m
		$V_{GS}=-4.5V$ $I_D=-2.0A$		49	60	m
Forward Transconductance	g_{FS}	V				

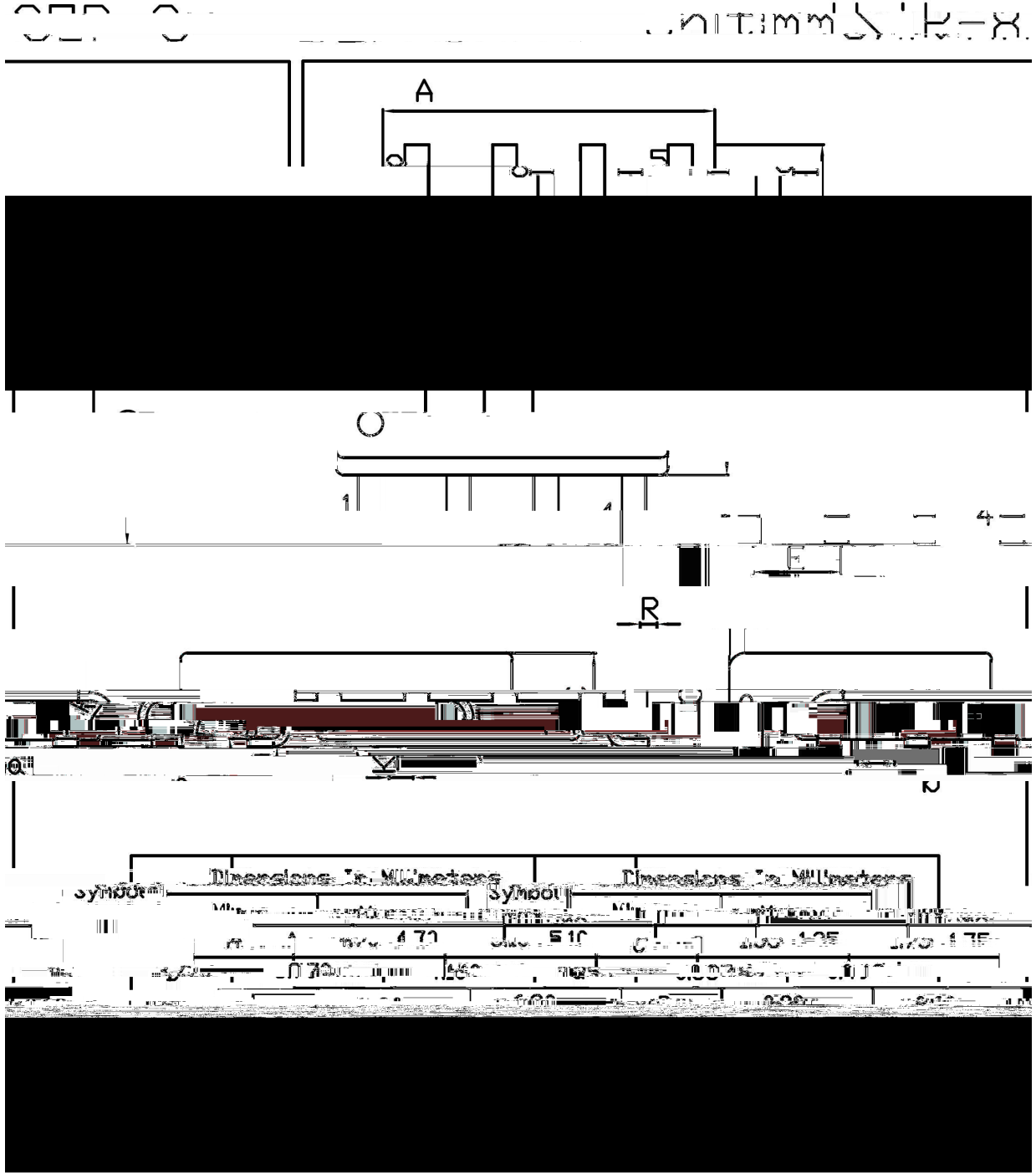
P- / P-CHANNEL Electrical Characteristic Curve



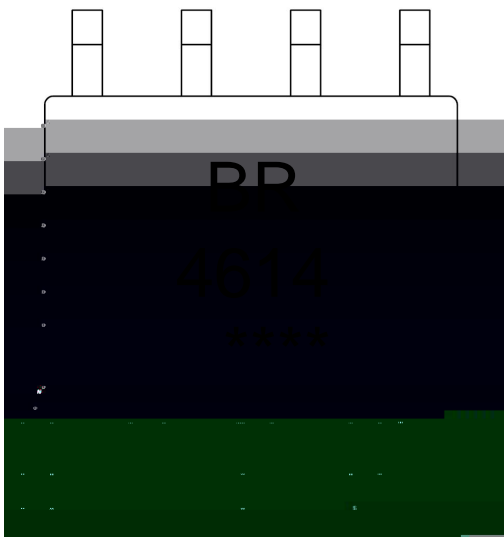
P- / P-CHANNEL Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



- BR · Company Code
 - 4614 · Product Type Code
 - **** · Lot No. Code, code change with Lot No
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 - 4614: · Product Type Code
 - ****: · Lot No. Code, code change with Lot No

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