

用途：适用于高压开关驱动电路。

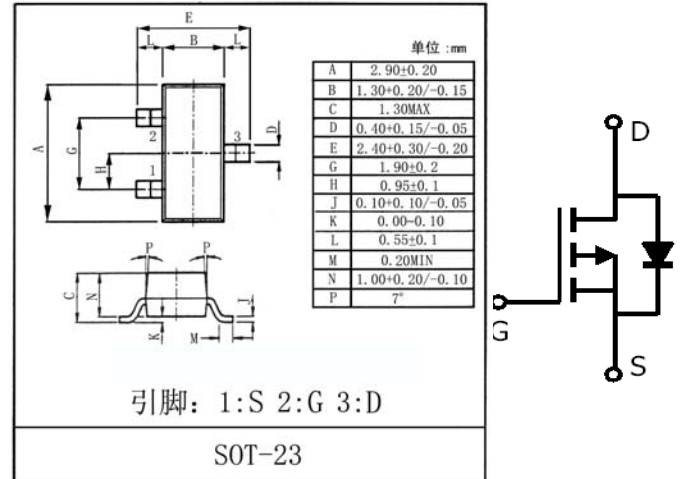
Purpose: This device is suitable for load switch of high voltage.

特点：ESD 防护，耗尽型 ( $V_{GS(th)}$  典型值  $-1.8V$ )

Features: ESD Improved capability, Depletion mode ( $V_{GS(th)} = -1.8V$ , type).

极限参数/Absolute maximum ratings ( $T_a = 25^\circ C$ )

参数符号 Symbol	数值 Rating	单位 Unit
$V_{DS}$	600	V
$I_D (T_C = 25^\circ C)$	30	mA
$I_D (T_C = 70^\circ C)$	24	mA
$I_{DM}$	120	mA
$I_S$	25	mA
$I_{SM}$	100	mA
$V_{GS}$	$\pm 20$	V
$V_{ESD}$	300	V
$P_D$	0.5	W
$T_J, T_{STG}$	-55 to 150	$^\circ C$



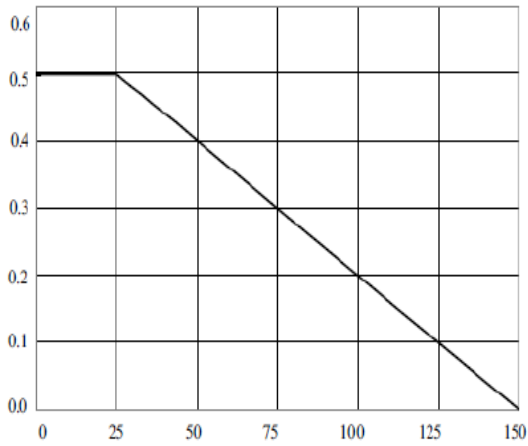
电性能参数/Electrical Characteristics ( $T_J = 25^\circ C$ )

参数符号 Symbol	测试条件 Test Conditions		最小值 Min	典型值 Typ	最大值 Max	单位 Unit
$BV_{DSS}$	$V_{GS} = 5.0V$	$I_D = 250 \mu A$	600			V
$I_{DSS}$	$V_{DS} = 25V$	$V_{GS} = 0V$	12			mA
$I_{GSS}$	$V_{GS} = \pm 20V$	$V_{DS} = 0V$			$\pm 10$	$\mu A$
$I_{D(off)}$	$V_{DS} = 600V$	$V_{GS} = 5.0V$			0.1	$\mu A$
$V_{GS(th)}$	$V_{DS} = 3.0V$	$I_D = 8.0 \mu A$	-2.7	-1.8	-1.0	V
$R_{DS(on)(1)}$	$V_{GS} = 0V$	$I_D = 3.0mA$		400	700	$\Omega$
$R_{DS(on)(2)}$	$V_{GS} = 10V$	$I_D = 16mA$		500	800	$\Omega$
$g_{FS}$	$V_{DS} = 50V$	$I_D = 0.01A$	0.008	0.017		S
$V_{SD}$	$V_{GS} = 5.0V$	$I_F = 16mA$			1.2	V
$C_{iss}$				50		pF
$C_{oss}$	$V_{DS} = 25V$	$V_{GS} = 5.0V$		4.53		pF
$C_{rss}$		$f = 1.0MHz$		1.08		pF
$t_{d(on)}$				9.9		ns
$t_r$	$I_D = 0.01A$	$V_{DD} = 300V$		55.8		ns
$t_{d(off)}$	$V_{GS} = 5.0V$	$R_G = 6.0 \Omega$		56.4		ns
$t_f$				136		ns

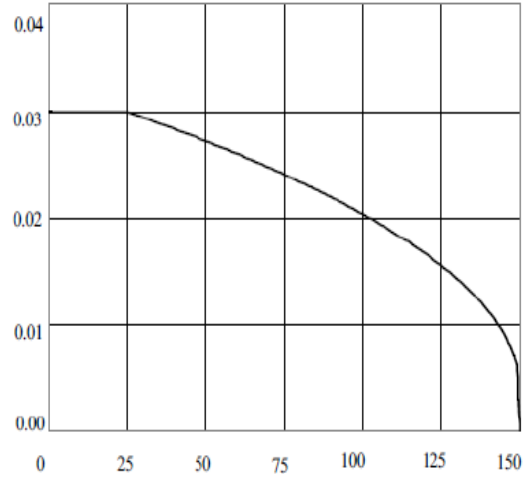
印章/Marking: H501

# BRM501D

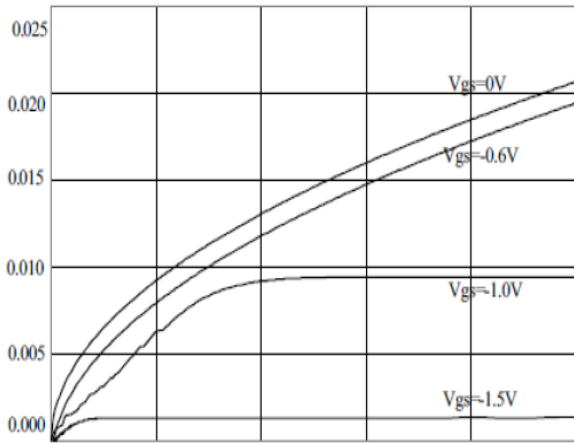
PD - TC



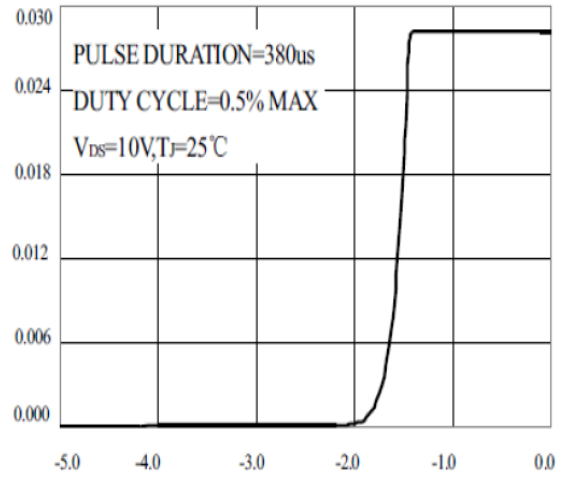
ID - TC



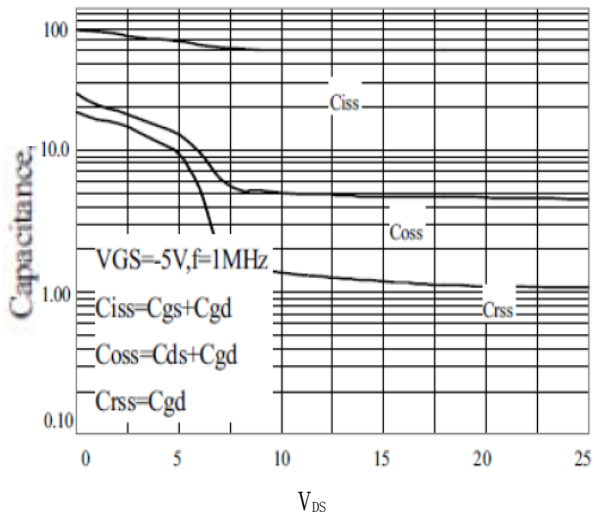
ID - VDS



ID - VGS



Ciss, Coss, Crss - VDS



BVDSS - Tj

