



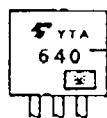
ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current		$I_{GSS}$	$V_{GS} = \pm 16\text{V}, V_{DS} = 0\text{V}$	—	—	$\pm 10$	$\mu\text{A}$
Drain Cut-off Current		$I_{DSS}$	$V_{DS} = 200\text{V}, V_{GS} = 0\text{V}$	—	—	100	$\mu\text{A}$
Drain-Source Breakdown Voltage		$V_{(BR)DSS}$	$I_D = 10\text{mA}, V_{GS} = 0\text{V}$	200	—	—	V
Gate Threshold Voltage		$V_{th}$	$V_{DS} = 10\text{V}, I_D = 1\text{mA}$	1.5	—	3.5	V
Drain-Source ON Resistance		$R_{DS(ON)}$	$V_{GS} = 10\text{V}, I_D = 10\text{A}$	—	0.13	0.18	$\Omega$
Forward Transfer Admittance		$ Y_{fs} $	$V_{DS} = 10\text{V}, I_D = 10\text{A}$	10	17	—	S
Input Capacitance		$C_{iss}$	$V_{DS} = 10\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$	—	2000	—	pF
Reverse Transfer Capacitance		$C_{riss}$		—	200	—	
Output Capacitance		$C_{oss}$		—	600	—	
Switching Time	Rise Time	$t_r$		—	35	—	ns
	Turn-on Time	$t_{on}$		—	50	—	
	Fall Time	$t_f$		—	10	—	
	Turn-off Time	$t_{off}$		$V_{IN} : t_r, t_f < 5\text{ns},$ $\text{Duty} \leq 1\%, t_w = 10\mu\text{s}$	—	66	
Total Gate Charge (Gate-Source Plus Gate-Drain)		$Q_g$	$V_{DD} = 100\text{V}, V_{GS} = 10\text{V}$	—	40	—	nC
Gate-Source Charge		$Q_{gs}$	$I_D = 15\text{A}$	—	25	—	
Gate-Drain ("Miller") Charge		$Q_{gd}$		—	15	—	

SOURCE-DRAIN DIODE RATINGS AND CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Continuous Drain Reverse Current	$I_{DR}$	—	—	—	15	A
Pulse Drain Reverse Current	$I_{DRP}$	—	—	—	45	A
Diode Forward Voltage	$V_{DSF}$	$I_{DR} = 15\text{A}, V_{GS} = 0\text{V}$	—	—	-2.0	V
Reverse Recovery Time	$t_{rr}$	$I_{DR} = 15\text{A}, V_{GS} = 0\text{V}$	—	180	—	ns
Reverse Recovery Charge	$Q_{rr}$	$dI_{DR} / dt = 100\text{A} / \mu\text{s}$	—	1.13	—	$\mu\text{C}$

## MARKING



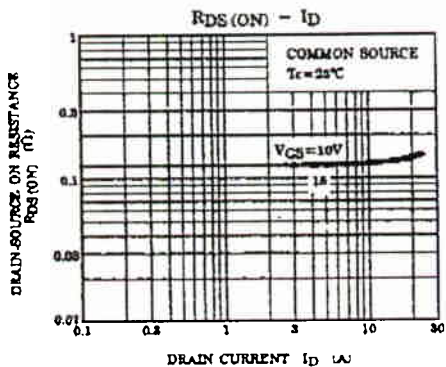
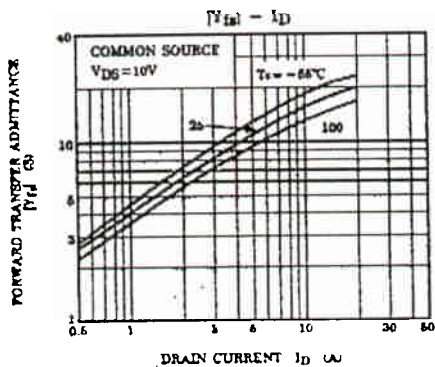
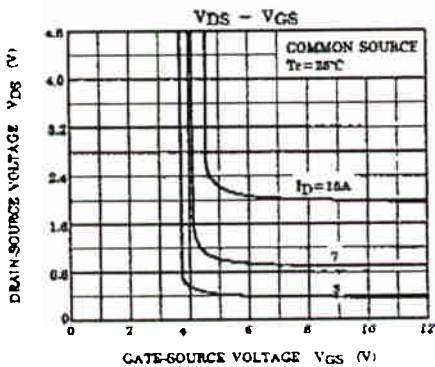
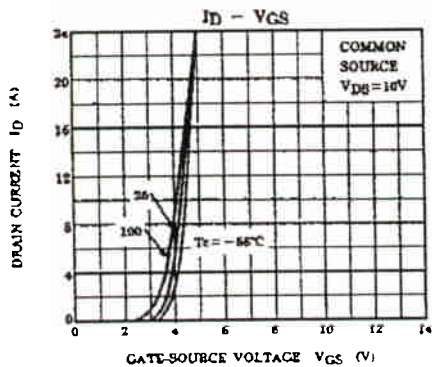
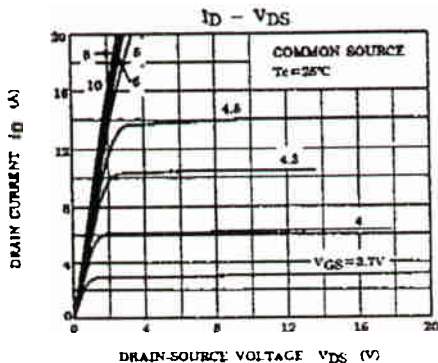
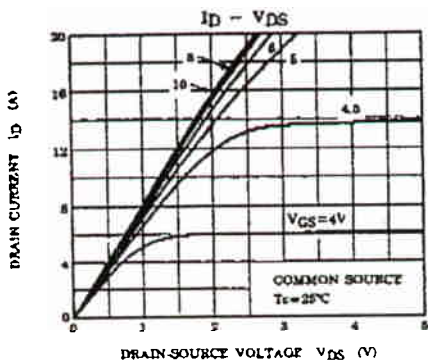
TYPE

※ Lot Number

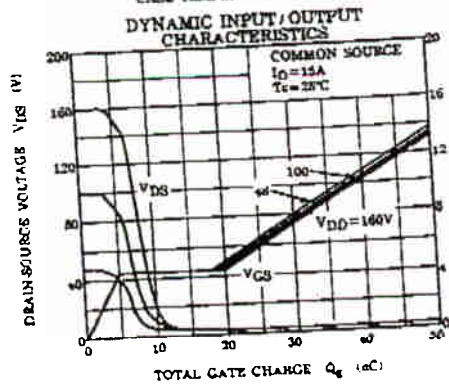
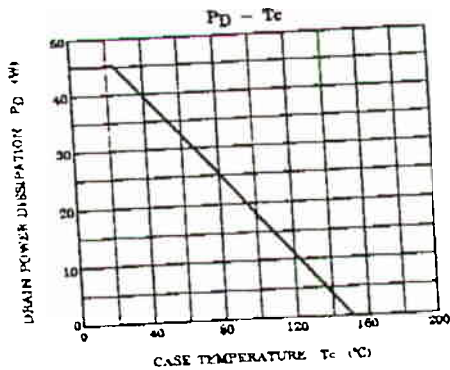
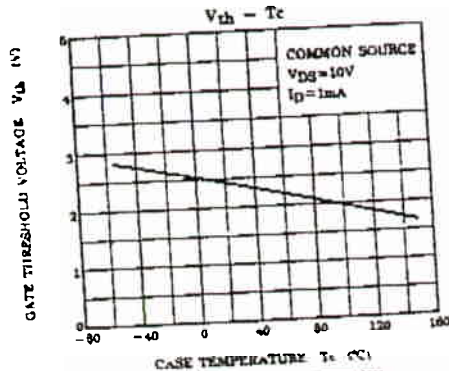
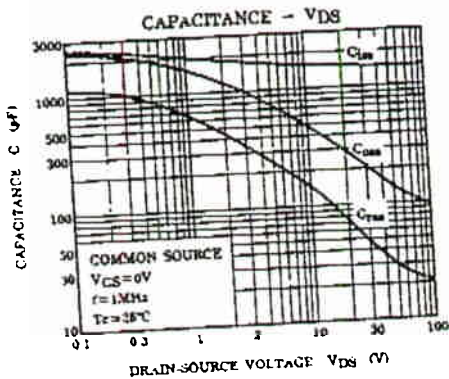
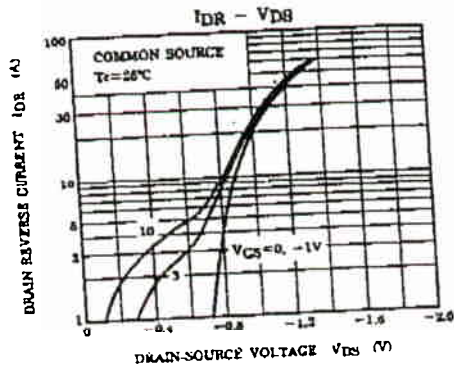
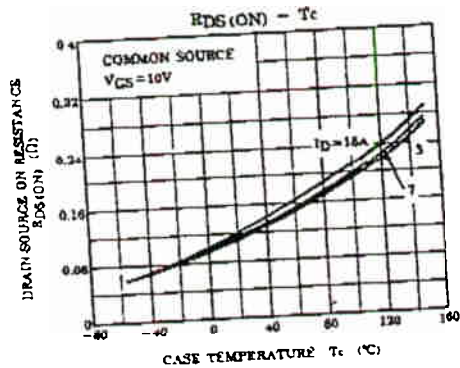


Week (01 to 53)

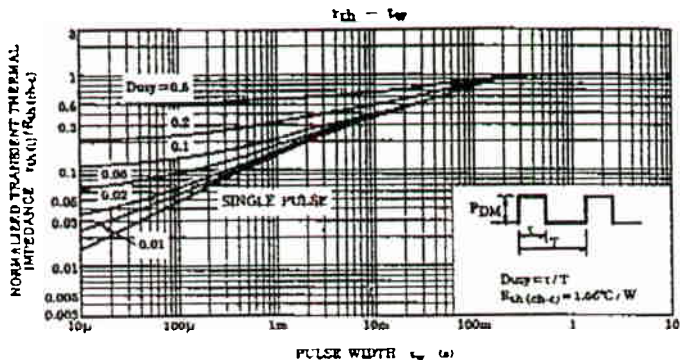
Year (Last Number of the Christian Era)



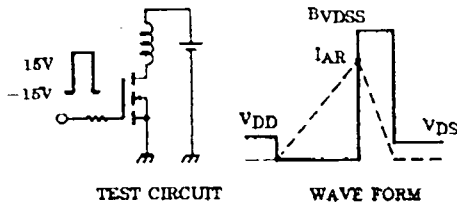
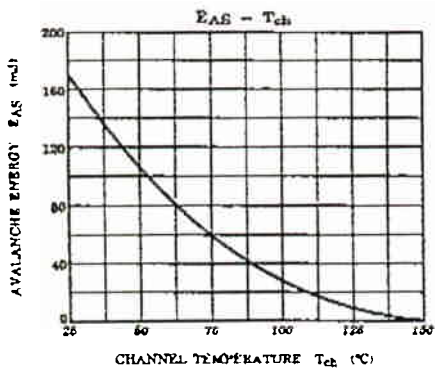
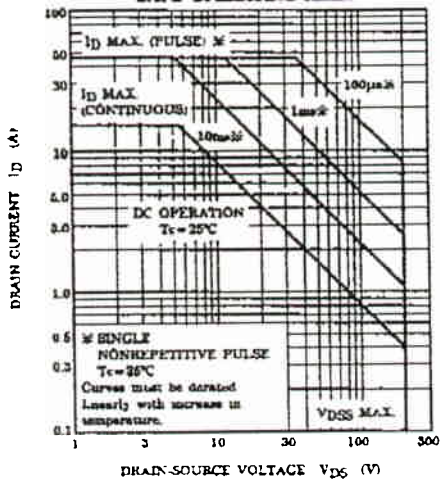




GATE-SOURCE VOLTAGE  $V_{GS}$  (V)



SAFE OPERATING AREA



Peak  $I_{AR} = 16A$ ,  $R_G = 26\Omega$   
 $V_{DD} = 60V$ ,  $L = 1.2mH$

$$E_{AS} = \frac{1}{2} \cdot L \cdot I_{AR}^2 \cdot \left( \frac{BV_{DSS}}{BV_{DSS} - V_{DD}} \right)$$