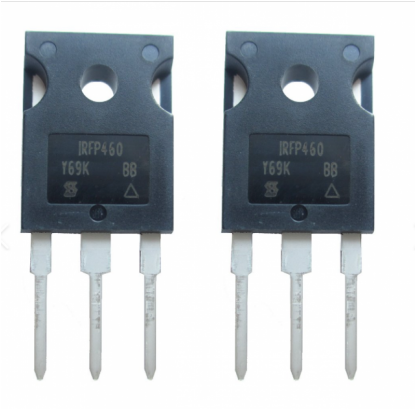

Mosfet IRFP460

URL:https://www.sxplc.com/mosfet-irfp460

Product data sheet

THERMAL RESISTANCE RATINGS				
PARAMETER	**SYMBOL**	**TYP.**	**MAX.**	**UNIT**
Maximum Junction-to-Ambient	R_{thJA}	-	40	°C/W
Case-to-Sink, Flat, Greased Surface	R_{thCS}	0.24	-	
Maximum Junction-to-Case (Drain)	R_{thJC}	-	0.45	

SPECIFICATIONS T_J = 25 °C, unless otherwise noted							
PARAMETER	**SYMBOL**	**TEST CONDITIONS**		**MIN.**	**TYP.**	**MAX.**	**UNIT**
Static							
Drain-Source Breakdown Voltage	V_{DS}	V_{GS} = 0 V, I_D = 250 µA		500	-	-	V
V_{DS} Temperature Coefficient	$\Delta V_{DS}/T_J$	Reference to 25 °C, I_D = 1 mA		-	0.63	-	V/°C
Gate-Source Threshold Voltage	$V_{GS(th)}$	V_{DS} = V_{GS}, I_D = 250 µA		2.0	-	4.0	V
Gate-Source Leakage	I_{GSS}	V_{GS} = ± 20 V		-	-	± 100	nA
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS} = 500 V, V_{GS} = 0 V		-	-	25	µA
		V_{DS} = 400 V, V_{GS} = 0 V, T_J = 125 °C		-	-	250	
Drain-Source On-State Resistance	$R_{DS(on)}$	V_{GS} = 10 V	I_D = 12 A[b]	-	-	0.27	Ω
Forward Transconductance	g_{fs}	V_{DS} = 50 V, I_D = 12 A[b]		13	-	-	S
Dynamic							
Input Capacitance	C_{iss}	V_{GS} = 0 V, V_{DS} = 25 V, f = 1.0 MHz, see fig. 5		-	4200	-	pF
Output Capacitance	C_{oss}			-	870	-	
Reverse Transfer Capacitance	C_{rss}			-	350	-	
Total Gate Charge	Q_g	V_{GS} = 10 V	I_D = 20 A, V_{DS} = 400 V see fig. 6 and 13[b]	-	-	210	nC
Gate-Source Charge	Q_{gs}			-	-	29	
Gate-Drain Charge	Q_{gd}			-	-	110	
Turn-On Delay Time	$t_{d(on)}$	V_{DD} = 250 V, I_D = 20 A , R_G = 4.3 Ω, R_D = 13 Ω, see fig. 10[b]		-	18	-	ns
Rise Time	t_r			-	59	-	
Turn-Off Delay Time	$t_{d(off)}$			-	110	-	
Fall Time	t_f			-	58	-	
Internal Drain Inductance	L_D	Between lead, 6 mm (0.25") from package and center of die contact		-	5.0	-	nH
Internal Source Inductance	L_S			-	13	-	