

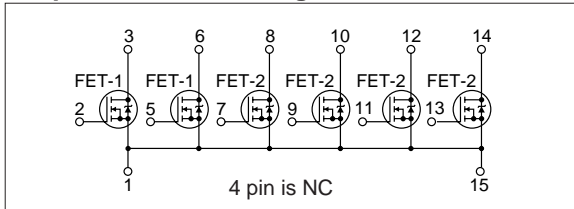
## Absolute maximum ratings

(T<sub>a</sub>=25°C)

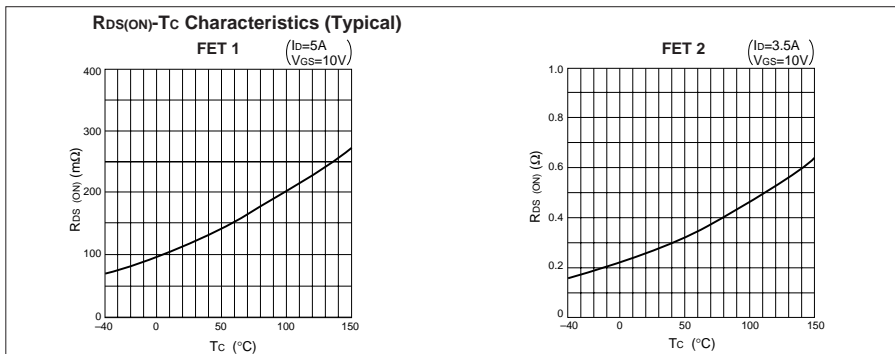
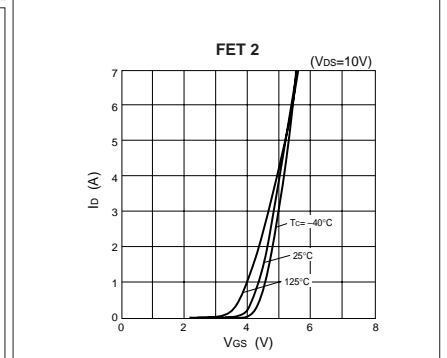
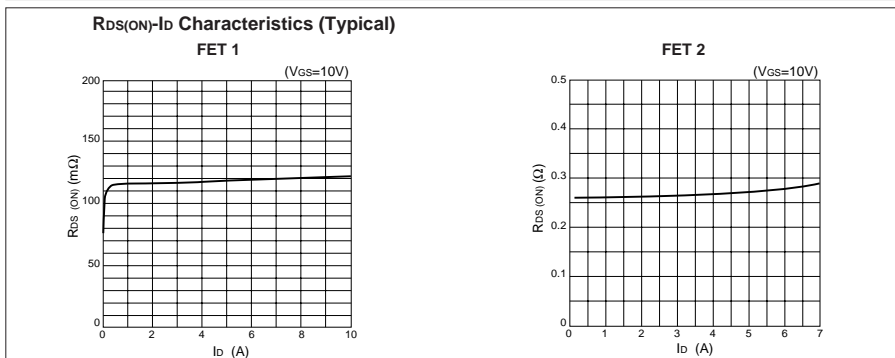
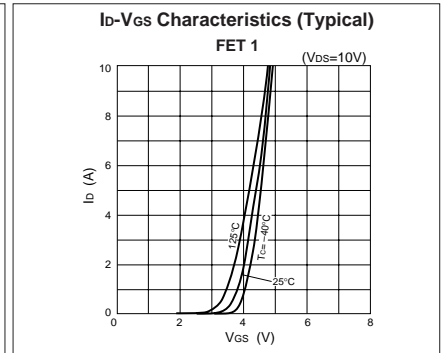
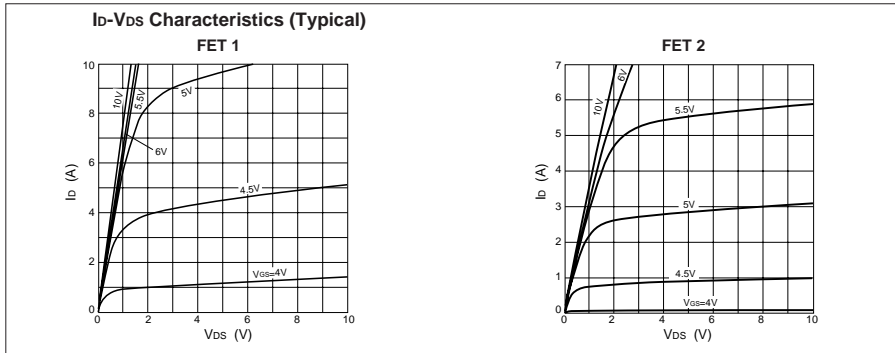
Symbol	Ratings		Unit
	FET 1	FET 2	
V <sub>DSS</sub>	200		V
V <sub>GSS</sub>	±20		V
I <sub>D</sub>	±7		A
I <sub>D(pulse)</sub> *	±15		A
P <sub>T</sub>	5 (T <sub>a</sub> =25°C, with all circuits operating, without heatsink)		W
	35 (T <sub>c</sub> =25°C, with all circuits operating, with infinite heatsink)		W
θ <sub>j-a</sub>	25 (Junction-Air, T <sub>a</sub> =25°C, with all circuits operating)		°C/W
θ <sub>j-c</sub>	3.57 (Junction-Case, T <sub>c</sub> =25°C, with all circuits operating)		°C/W
V <sub>ISO</sub>	1000 (Between fin and lead pin, AC)		V <sub>rms</sub>
T <sub>ch</sub>	150		°C
T <sub>stg</sub>	-40 to +150		°C

\* : PW≤100μs, duty≤50%

## Equivalent circuit diagram



## Characteristic curves



## Electrical characteristics

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

Symbol	FET 1					FET 2				
	Specification			Unit	Conditions	Specification			Unit	Conditions
	min	typ	max			min	typ	max		
$V_{(BR)DSS}$	200			V	$I_D=100\mu\text{A}, V_{GS}=0\text{V}$	200			V	$I_D=100\mu\text{A}, V_{GS}=0\text{V}$
$I_{GSS}$			$\pm 100$	nA	$V_{GS}=\pm 20\text{V}$			$\pm 100$	nA	$V_{GS}=\pm 20\text{V}$
$I_{DSS}$			100	$\mu\text{A}$	$V_{DS}=200\text{V}, V_{GS}=0\text{V}$			100	$\mu\text{A}$	$V_{DS}=200\text{V}, V_{GS}=0\text{V}$
$V_{TH}$	2.0		4.0	V	$V_{DS}=10\text{V}, I_D=1\text{mA}$	2.0		4.0	V	$V_{DS}=10\text{V}, I_D=1\text{mA}$
$R_{e(yfs)}$	4.5	6.5		S	$V_{DS}=10\text{V}, I_D=3.5\text{A}$	2.5	5.0		S	$V_{DS}=10\text{V}, I_D=3.5\text{A}$
$R_{DS(ON)}$		130	175	$\text{m}\Omega$	$V_{GS}=10\text{V}, I_D=3.5\text{A}$		270	350	$\text{m}\Omega$	$V_{GS}=10\text{V}, I_D=3.5\text{A}$
$C_{iss}$		850		pF	$V_{DS}=10\text{V}$		450		pF	$V_{DS}=10\text{V}$
$C_{oss}$		550		pF	$f=1.0\text{MHz}$		280		pF	$f=1.0\text{MHz}$
$C_{rss}$		250		pF	$V_{GS}=0\text{V}$		120		pF	$V_{GS}=0\text{V}$
$t_d(\text{on})$		20		ns	$I_D=3.5\text{A}$		20		ns	$I_D=3.5\text{A}$
$t_r$		25		ns	$V_{DD}\div 100\text{V}$		30		ns	$V_{DD}\div 100\text{V}$
$t_d(\text{off})$		90		ns	$R_L=28.6\Omega$		55		ns	$R_L=28.6\Omega$
$t_f$		70		ns	$V_{GS}=10\text{V}$		75		ns	$V_{GS}=10\text{V}$
$V_{SD}$		1.0	1.5	V	$I_{SD}=7\text{A}, V_{GS}=0\text{V}$		1.0	1.5	V	$I_{SD}=7\text{A}, V_{GS}=0\text{V}$
$t_{rr}$		500		ns	$I_F=\pm 100\text{mA}$		450		ns	$I_F=\pm 100\text{mA}$

## Characteristic curves

