

POWER MOSFET

20V MOSFET series

N-Channel, Enhancement type



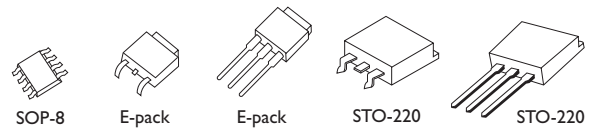
SOP-8

Type No.	Absolute Maximum Ratings					Electrical Characteristics					Outline	
	Tch	V _{DSS}	V _{GSS}	I _D	P _T	R _{DS(ON)} V _{GS} =2.5V (max)	C _{iss} (typ)	C _{rss} (typ)	t _{on} (typ)	t _{off} (typ)		
	[°C]	[V]	[V]	[A]	[W]	[Ω]	[pF]	[pF]	[ns]	[ns]	Package	Figure
F7H2N	150	20	±12	7	2	0.029	1450	170	230	215	SOP-8	92
F5H2ND				5	2	0.047	700	95	100	170		

D: Dual, without D is Single

30V MOSFET series

N-Channel, P-Channel, Enhancement type



Type No.	Absolute Maximum Ratings					Electrical Characteristics					Outline	
	Tch	V _{DSS}	V _{GSS}	I _D	P _T	R _{DS(ON)} V _{GS} =4V (max)	C _{iss} (typ)	C _{rss} (typ)	t _{on} (typ)	t _{off} (typ)		
	[°C]	[V]	[V]	[A]	[W]	[Ω]	[pF]	[pF]	[ns]	[ns]	Package	Figure
2SK2816	150	30	±20	5	10	0.16	180	40	30	65	E-pack	78-4 (SMD 77-4)
2SK2817				10	15	0.1	300	60	60	100		
2SK2818				15	20	0.07	440	90	95	150		
2SK2819				20	25	0.04	790	150	125	230		
2SK2820				45	55	0.02	1720	330	305	465		
2SK2821				70	70	0.01	3800	710	400	950	STO-220	76-2 (SMD 74-3)
2SJ487	150	-30	±20	-3	10	0.5	230	30	50	55	E-pack	78-4 (SMD 77-4)
2SJ488				-5	15	0.3	320	40	60	85		
2SJ489				-7	20	0.21	480	50	85	130		
2SJ490				-10	25	0.12	870	90	120	195		
2SJ491				-20	55	0.06	1900	210	245	385	STO-220	*1
F4H3N	150	30	±20	4	2	0.1	300	60	40	95	SOP-8	92
F5H3N				5	2	0.07	440	90	50	140		
F8H3N				8	2	0.04	730	150	60	220		
F10H3N				10	2	0.023	1400	340	130	450		
F2H3ND				2.5	2	0.25	130	30	25	47		
F3H3ND				3	2	0.16	180	40	30	65		
F4H3ND				4	2	0.1	300	60	40	95		
F5H3ND				5	2	0.07	440	90	50	140		
F3H3P		-30	±20	-2.5	2	0.3	320	40	45	90		
F4H3P				-3.5	2	0.21	480	50	55	120		
F5H3P				-4.5	2	0.12	760	90	60	190		
F7H3P				-6.5	2	0.06	1550	210	160	550		
F3H3PD				-2.5	2	0.3	320	40	45	90		
F4H3PD				-3.5	2	0.21	480	50	55	120		
F3H3C	150	30	±20	2.5	2	0.25	130	30	25	47		
		-30		-2.5		0.3	320	40	45	90		
F4H3C	150	30	±20	4	2	0.1	300	60	40	95		
		-30		-3.5		0.21	480	50	55	120		

D: Dual; C: Complement; without D or C is Single

*1: Leaded package - Fig. 76-2; SMD package - Fig. 74-3

40V MOSFET series

N-Channel, Enhancement type

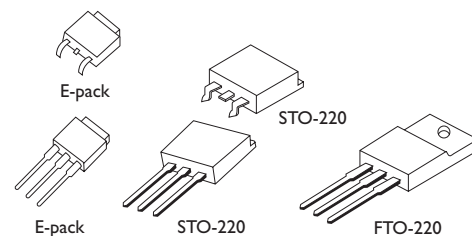


SOP-8

Type No.	Absolute Maximum Ratings					Electrical Characteristics					Outline	
	Tch	V _{DSS}	V _{GSS}	I _D	P _T	R _{DS(ON)} V _{GS} =4V (max)	C _{iss} (typ)	C _{rss} (typ)	t _{on} (typ)	t _{off} (typ)		
	[°C]	[V]	[V]	[A]	[W]	[Ω]	[pF]	[pF]	[ns]	[ns]	Package	Figure
F9H4N	150	40	±20	9	2	0.03	1500	220	110	380	SOP-8	92

D: Dual, without D is Single

POWER MOSFET

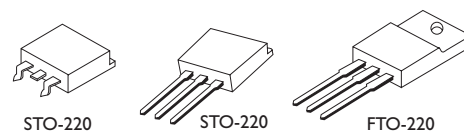


60V MOSFET series

N-Channel, P-Channel, Enhancement type

Type No.	Absolute Maximum Ratings					Electrical Characteristics					Outline	
	Tch	V _{DSS}	V _{GSS}	I _D	P _T	R _{DS (ON)} (max)	C _{iss} (typ)	C _{rss} (typ)	t _{on} (typ)	t _{off} (typ)		
	[°C]	[V]	[V]	[A]	[W]	[Ω]	[pF]	[pF]	[ns]	[ns]	Package	Figure
2SK2279	150	60	±20	2	15	0.35	190	30	30	95	E-pack	78-4 (SMD 77-4)
2280				5	20	0.16	420	80	50	155		
2281				10	25	0.1	700	120	70	230		
2282					40							
2283				15	30	0.07	960	160	90	280		
2284					50							
2285				20	35	0.045	1500	280	110	430		
2286					60							
2287				30	40	0.03	2300	400	150	630		
2288					70							
2289				45	50	0.02	3800	700	240	985		
2291					75							
2SJ365				150	-60	±20	-2	20	0.45	400	90	40
366	-5	25	0.25				630	150	55	260		
367		40										
368	-10	30	0.16				900	210	75	300		
369		50										
370	-15	35	0.1				1350	340	110	480		
371		60										
372	-20	40	0.07				2050	520	160	700		
373		70										
374	-30	50	0.045				3500	800	250	1100		
375		75										
376	55											

*I: Leaded package - Fig. 76-2; SMD package - Fig. 74-3.

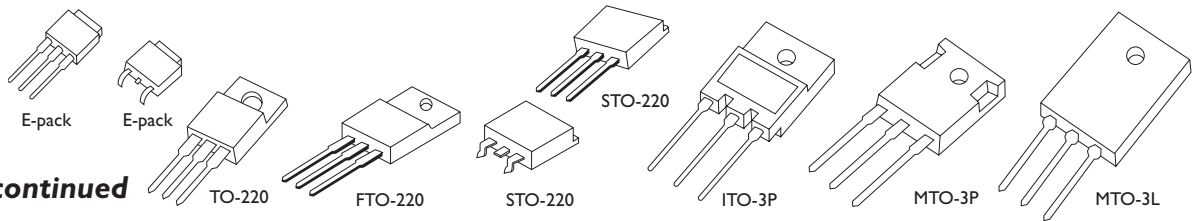


VZ series

Type No.	Absolute Maximum Ratings					Electrical Characteristics					Outline		
	Tch	V _{DSS}	V _{GSS}	I _D	P _T	R _{DS (ON)} (max)	C _{ISS} (typ)	C _{RSS} (typ)	t _{ON} (typ)	t _{OFF} (typ)			
	[°C]	[V]	[V]	[A]	[W]	[Ω]	[pF]	[pF]	[ns]	[ns]	Package	Figure	
2SK2489	150	180	±30	10	45	0.25	720	80	50	140	STO-220	*I	
2490					40						FTO-220	84-4	
2491				20	70	0.13	1600	190	95	300	STO-220	*I	
2492													
2559		200		10	40	0.30	840	80	50	140	FTO-220	84-4	
2560				20	60	0.18	1800	165	100	280			

*I: Leaded package - Fig. 76-2; SMD package - Fig. 74-3

POWER MOSFET



VX-II series – continued

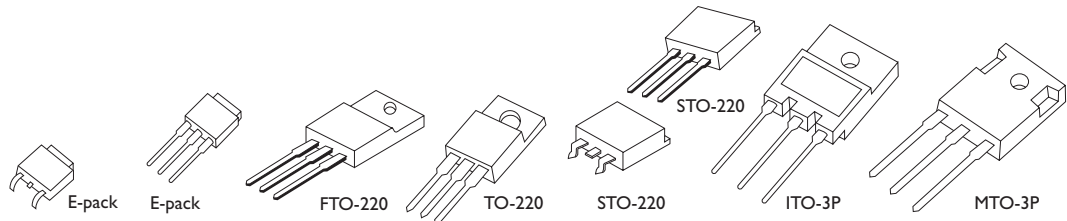
N-Channel, Enhancement type

Type No.	Absolute Maximum Ratings					Electrical Characteristics					Outline	
	Tch	VDSS	VGSS	ID	PT	RDS (ON) (max)	Ciss (typ)	Crss (typ)	ton (typ)	toff (typ)		
	[°C]	[V]	[V]	[A]	[W]	[Ω]	[pF]	[pF]	[ns]	[ns]	Package	Figure
2SK2191	150	500	±30	12	60	0.7	1200	90	90	190	STO-220	*1
2192					80						MTO-3P	86-3
2193					50						ITO-3P	88-4
2475				15	110	0.45	1900	135	110	270	FTO-220	84-4
2194					60						MTO-3P	86-3
2195					125						ITO-3P	88-4
2196				20	70	0.35	2400	170	135	340	MTO-3P	86-3
2197					220						ITO-3P	88-4
2198				30	220	0.23	3700	230	220	500	MTO-3L	89-2
3005	150	600	±30	2	20	4.4	250	20	20	50	E-Pack	*2
2563					30						FTO-220	84-4
★ 3006				4	50	2.2	540	40	28	110	TO-220	80-4
★ 3007					50						STO-220	*1
2564					60						FTO-220	84-4
3009				8	60	1.2	1130	85	55	195	STO-220	*1
★ 3011					80						MTO-3P	86-3
3012					125						MTO-3P	
3013				16	70	0.6	2300	180	130	260	ITO-3P	88-4

*1 : Leaded package - Fig. 76-2; SMD package - Fig. 74-3

*2 : Leaded package - Fig. 78-4; SMD package - Fig. 77-4

★ : Under development



HVX-II series

N-Channel, Enhancement type

Type No.	Absolute Maximum Ratings					Electrical Characteristics					Outline		
	Tch	Vdss	Vgss	ID	PT	RDS (ON) (max)	Ciss (typ)	Crss (typ)	ton (typ)	toff (typ)			
	[°C]	[V]	[V]	[A]	[W]	[Ω]	[pF]	[pF]	[ns]	[ns]	Package	Figure	
2SK2333	150	700	±30	6	50	2.0	1250	250	70	160	FTO-220	84-4	
2663		900		1	10	14.0	230	5	10	50	E-pack	*1	
2664				3	50	4.7	630	16	40	140	TO-220	80-4	
2665											50	STO-220	*2
2666											30	FTO-220	84-4
2667											65	MTO-3P	86-3
2668											40	ITO-3P	88-4
2669				5	60	2.8	1140	23	55	210	TO-220	80-4	
2670					60						STO-220	*2	
2671					40						FTO-220	84-4	
2672					80						MTO-3P	86-3	
2673					50						ITO-3P	88-4	
2674				7	100	2.0	1450	37	95	330	MTO-3P	86-3	
2675					55						ITO-3P	88-4	
2676					120						MTO-3P	86-3	
2677				10	65	1.4	2150	50	140	440	ITO-3P	88-4	

*1 : Leaded package - Fig. 78-4; SMD package - Fig. 77-4

*2 : Leaded package - Fig. 76-2; SMD package - Fig. 74-3