

# Schottky Barrier Diodes

## Single

## Surface Mount



G1F



1F



M1F



M2F



2F

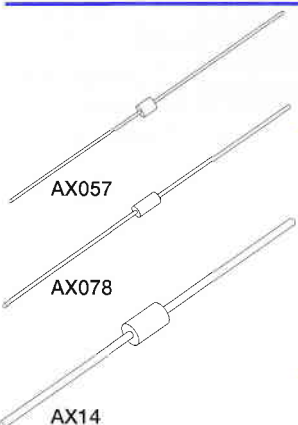


E-pack

Type No.	Absolute Maximum Ratings						Electrical Characteristics							Outline	
	VRM	Io	Conditions Tc [°C]	IFSM	Tstg	Tj	VF (max)	Conditions IF [A]	IR (max) VR=VRM	Cj (typ)	θjI (max)	θja (max)	θjc (max)	Package	Fig.
☆DG1J2A	20	1.5	60*2	30	-55 to 150	150	0.52	1.5	0.01	83	20	70	—	G1F	11
☆DG1H3		1.0	113*1	20	-55 to 125	125	0.36	0.7	1.0	37	25	70	22	G1F	11
☆DG1M3		1.0	27*2	20	-55 to 150	150	0.46	0.7	0.05	36	25	70	22	G1F	11
M1FP3		1.29	25*2	30	-55 to 125	125	0.35	0.4	2.5	90	20	108	—	M1F	12
☆DG1H3A		1.5	107*1	30	-55 to 125	125	0.36	1.5	1.0	70	25	70	22	G1F	11
☆DG1M3A		1.5	37*2	30	-55 to 150	150	0.46	1.5	0.05	70	25	70	22	G1F	11
M1FH3		1.5	105	30	-55 to 125	125	0.30	0.5	1.0	80	20	80	18	M1F	12
D1FP3		2	98*1	60	-55 to 125	125	0.4	2	4.5	130	23	108	—	1F	13-1
D1FH3	30	3	95	60	-55 to 125	125	0.30	1.0	1.0	130	18	65	16	1F	13-1
D3FP3		3	74*1	150	-55 to 125	125	0.4	3	10	300	24	90	—	2F	16-1
M1FM3		3	100	30	-55 to 150	150	0.40	0.5	0.05	80	20	80	18	M1F	12
D1FM3		5	83	90	-55 to 150	150	0.40	1.0	0.1	130	18	65	16	1F	13-1
M2FH3		6	70	110	-55 to 125	125	0.30	2	4	240	16	55	14	M2F	15-1
M2FM3		6	99	120	-55 to 150	150	0.40	2	0.2	240	16	55	14	M2F	15-1
DE10P3		10	95	200	-55 to 125	125	0.4	8	25	600	—	—	4	E-pack	31-4
DE10S3L		10	124	250	-55 to 150	150	0.45	8	10	640	—	—	4	E-pack	31-4
☆DG1S4		1.0	36*2	30	-55 to 150	150	0.55	0.7	0.8	37	20	70	—	G1F	11
D1FS4		1.1	51*2	30	-55 to 150	150	0.55	1.1	1	65	23	108	—	1F	13-1
M1FS4		1.33	25*2	30	-55 to 150	150	0.55	1.1	0.8	50	20	108	—	M1F	12
☆M1FJ4		1.5	31*2	30	-55 to 150	150	0.57	1	0.05	65	20	108	—	M1F	12
D1FS4A		1.5	28*2	60	-55 to 150	150	0.45	1.1	2	95	23	108	—	1F	13-1
D2FS4	40	1.6	34*2	60	-55 to 150	150	0.55	1.6	2.5	150	24	90	—	2F	16-1
☆D1FJ4		2.0	117*1	50	-55 to 150	150	0.57	1.5	0.2	96	23	108	—	1F	13-1
D3FS4A		2.6	34*2	150	-55 to 150	150	0.45	2.6	5	340	23	80	—	2F	16-1
DE3S4M		3	121	70	-40 to 150	150	0.55	3	2.5	150	—	55	12	E-pack	31-2
DE5S4M		5	101	80	-40 to 150	150	0.55	5	3.5	180	—	55	12	E-pack	31-2
☆DG1S6		1.0	30*1	30	-55 to 150	150	0.58	0.7	1	32	20	70	—	G1F	11
D1FS6		1.1	25*2	40	-55 to 150	150	0.58	1.1	1	50	23	108	—	1F	13-1
M1FS6		1.2	25*2	40	-55 to 150	150	0.58	1.1	1	53	20	108	—	M1F	12
D2FS6	60	1.5	31*2	60	-55 to 150	150	0.58	2	2	120	24	90	—	2F	16-1
D3FS6		3	87*1	80	-55 to 150	150	0.58	3	2.5	130	24	90	—	2F	16-1
DE3S6M		3	117	80	-40 to 150	150	0.58	3	2.5	130	—	55	12	E-pack	31-2
DE5S6M		5	96	90	-40 to 150	150	0.58	5	4.5	200	—	55	12	E-pack	31-2
☆DG1J10A		1.0	125*1	30	-55 to 150	150	0.82	1	0.1	43	20	70	—	G1F	11
☆D1FJ10	100	1.0	59*2	50	-55 to 150	150	0.72	1	0.2	63	23	108	—	1F	13-1
☆D3FJ10		3	92*1	100	-55 to 150	150	0.74	3	0.4	143	23	115	—	2F	16-1
☆DG1N15A	150	1.4	65*2	30	-55 to 150	150	0.88	1.4	0.05	32	20	70	—	G1F	11

☆: New product \* 1: Tj \* 2: Ta

## Axial



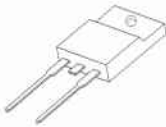
Type No.	Absolute Maximum Ratings						Electrical Characteristics						Outline		
	VRM	Io	Conditions Ta [°C]	IFSM	Tstg	Tj	VF (max)	Conditions IF [A]	IR (max) VR=VRM	Cj (typ)	θjI (max)	θja (max)	Package	Color Code	Fig.
D1NS4*2		1	59	30	-55 to 150	150	0.55	1	0.8	50	10	113	AX057	—	1
D2S4M*3	40	2	122*1	60	-40 to 150	150	0.55	2	2	95	17	105	AX078	Silver	5-1
D3S4M*2		3	63	80	-40 to 150	150	0.55	3	3.5	150	6.5	36	AX14	Silver	8
D1NS6*2		1	46	30	-55 to 150	150	0.58	1	1	53	10	113	AX057	—	1
S2S6M*3	60	1.3	52	60	-40 to 150	150	0.58	2	2	120	8	86	AX10	Blue	6-1
D2S6M*3		2	119*1	60	-40 to 150	150	0.58	2	2	120	17	105	AX078	Blue	5-1
D3S6M*2		3	133*1	80	-40 to 150	150	0.58	3	2.5	130	6.5	62	AX14	Blue	8
☆D1NJ10*3	100	1	137*1	30	-55 to 150	150	0.82	1	0.1	43	10	113	AX057	—	1

☆: New product \* 1: Tj \* 2: Spec Code 5□□□ \* 3: Spec Code 7□□□  
(See page 44 for the last 3 digits of the Spec Code)

## Two Terminal Type



ITO-220



FTO-220

Type No.	Absolute Maximum Ratings						Electrical Characteristics					Outline	
	VRM [V]	Io [A]	Conditions Tc [°C]	IFSM [A]	Tstg [°C]	Tj [°C]	VF (max) [V]	Conditions IF [A]	IR (max) VR=VRM [mA]	Cj (typ) [pF]	θjc (max) [°C/W]	Package	Fig.
SF20H1R5	15	20	97	250	-55 to 125	125	0.41	20	10	960	2.0	FTO-220	47
SF30H1R5		30	89	400	-55 to 125	125	0.41	30	15	1400	2.0	FTO-220	47
D5S4M	40	5	131	100	-40 to 150	150	0.55	5	3.5	180	4.5	ITO-220	41
SF5S4		5	136	150	-40 to 150	150	0.55	5	3.5	180	3.5	FTO-220	47
D5S6M	60	5	130	100	-55 to 150	150	0.58	5	4.5	260	4.5	ITO-220	41
SF5S6		5	134	150	-55 to 150	150	0.58	5	4.5	200	3.5	FTO-220	47
D5S9M	90	5	121	100	-40 to 150	150	0.75	5	3.0	185	4.5	ITO-220	41

## Center Tap, Common Cathode

### Surface Mount



E-pack



STO-220

Type No.	Absolute Maximum Ratings						Electrical Characteristics					Outline		
	VRM [V]	Io [A]	Conditions Tc [°C]	IFSM [A]	Tstg [°C]	Tj [°C]	VF (max) [V]	Conditions IF [A]	IR (max) VR=VRM [mA]	Cj (typ) [pF]	θjc (max) [°C/W]	Package	Fig.	
DE5PC3	30	5	90	90	-55 to 125	125	0.4	2.5	6	180	12	E-pack	31-1	
DE5SC3ML		5	110	90	-55 to 150	150	0.45	2.5	3.5	190	12	E-pack	31-1	
DE10PC3		10	97	80	-55 to 125	125	0.4	4	10	290	4	E-pack	31-1	
DE10SC3L		10	124	100	-55 to 150	150	0.45	4	5	290	4	E-pack	31-1	
DF20PC3M		20	105	200	-55 to 125	125	0.4	8	35	560	1.6	STO-220	36-1	
DF30PC3M		30	97	300	-55 to 125	125	0.4	10	50	840	1.6	STO-220	36-1	
DF30SC3ML		30	119	350	-55 to 150	150	0.45	12.5	10	820	1.6	STO-220	36-1	
DF40PC3		40	105	350	-55 to 125	125	0.4	15	45	1160	0.8	STO-220	36-1	
DF40SC3L		40	112	400	-55 to 150	150	0.45	15	17	1200	1.5	STO-220	36-1	
DE5SC4M		40	5	101	80	-40 to 150	150	0.55	2.5	3.5	150	12	E-pack	31-1
DE10SC4			10	132	100	-55 to 150	150	0.55	5	3.5	210	4	E-pack	31-1
DF10SC4M			10	125	100	-40 to 150	150	0.55	5	3.5	180	3	STO-220	36-1
DF15SC4M			15	129	150	-40 to 150	150	0.55	7.5	5	340	1.7	STO-220	36-1
DF20SC4M			20	122	230	-40 to 150	150	0.55	10	7.5	390	1.7	STO-220	36-1
DF30JC4			30	115	250	-55 to 150	150	0.61	15	0.7	560	1.6	STO-220	36-1
DF30SC4M			30	112	360	-40 to 150	150	0.55	15	10	590	1.6	STO-220	36-1
DF40SC4	40		106	350	-55 to 150	150	0.55	20	14	860	1.5	STO-220	36-1	
DE5SC6M	60	5	92	80	-40 to 150	150	0.58	2.5	2.5	130	12	E-pack	31-1	
DF10SC6		10	132	150	-55 to 150	150	0.58	5	4.5	260	2.0	STO-220	36-1	
DF25SC6M		25	115	300	-40 to 150	150	0.58	12.5	10	490	1.6	STO-220	36-1	
DF30JC6		30	108	250	-55 to 150	150	0.69	15	0.7	490	1.6	STO-220	36-1	
DF10SC9	90	10	131	150	-55 to 150	150	0.75	5	3	185	1.2	STO-220	36-1	
DF20SC9M		20	111	200	-40 to 150	150	0.75	10	10	370	1.6	STO-220	36-1	
DF15JC10	100	15	126	150	-55 to 150	150	0.86	7.5	0.6	200	1.8	STO-220	36-1	
DF20JC10		20	121	200	-55 to 150	150	0.86	10	0.7	260	1.6	STO-220	36-1	
DF30JC10		30	116	300	-55 to 150	150	0.86	15	1.0	390	1.3	STO-220	36-1	
☆DF10NC15	150	10	131	100	-55 to 150	150	0.88	5	0.2	110	2.1	STO-220	36-1	
☆DF15NC15		15	126	150	-55 to 150	150	0.88	7.5	0.3	155	1.8	STO-220	36-1	
☆DF20NC15		20	121	200	-55 to 150	150	0.88	10	0.4	200	1.6	STO-220	36-1	
☆DF30NC15		30	115	300	-55 to 150	150	0.88	15	0.5	300	1.3	STO-220	36-1	

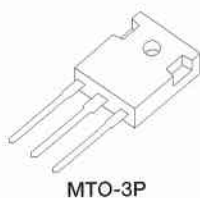
☆: New product

Center-tap



# Schottky Barrier Diodes .....

## Three Terminal Type

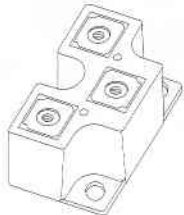


Type No.	Absolute Maximum Ratings						Electrical Characteristics					Outline	
	V <sub>RM</sub> [V]	I <sub>o</sub> [A]	I <sub>FSM</sub> [A]	T <sub>stg</sub> [°C]	T <sub>j</sub> [°C]	V <sub>F</sub> (max) [V]	I <sub>R</sub> (max) [mA]	C <sub>j</sub> (typ) [pF]	θ <sub>jc</sub> (max) [°C/W]	Package	Fig.		
S40HC1R5	15	40	103	350	-55 to 125	125	0.41	20	10	960	1.0	MTO-3P	46-1
S60HC1R5		60	90	500	-55 to 125	125	0.41	30	15	1400	1.0	MTO-3P	46-1
SF5SC3L	30	5	143	100	-55 to 150	150	0.45	2.5	3.5	220	2.3	FTO-220	48-1
SF10SC3L		10	139	150	-55 to 150	150	0.45	4	5	310	2.3	FTO-220	48-1
SF20SC3L		20	125	230	-55 to 150	150	0.45	8	9	570	2.0	FTO-220	48-1
SF30SC3L		30	111	350	-55 to 150	150	0.45	12.5	15	960	2	FTO-220	48-1
S40HC3		40	105	400	-55 to 125	125	0.40	20	15	800	0.7	MTO-3P	46-1
S60HC3		60	104	550	-55 to 125	125	0.40	30	20	1100	0.5	MTO-3P	46-1
S60SC3ML	40	60	130	500	-40 to 150	150	0.48	30	25	1600	0.5	MTO-3P	46-1
D5SC4M		5	136	50	-40 to 150	150	0.55	2.5	2.5	116	3.3	ITO-220	42-1
SF5SC4		5	140	80	-40 to 150	150	0.55	2.5	2.5	116	2.3	FTO-220	48-1
D10SC4M		10	123	100	-40 to 150	150	0.55	5	3.5	180	3.3	ITO-220	42-1
SF10SC4		10	131	150	-40 to 150	150	0.55	5	3.5	180	2.3	FTO-220	48-1
D15SC4M		15	117	150	-40 to 150	150	0.55	7.5	5	340	2.8	ITO-220	42-1
SF15SC4		15	125	200	-55 to 150	150	0.55	7.5	5	340	2.0	FTO-220	48-1
S15SC4M		15	135	170	-40 to 150	150	0.55	7.5	5	340	1.2	MTO-3P	46-1
SF20SC4		20	117	230	-55 to 150	150	0.55	10	7.5	390	2.0	FTO-220	48-1
S20SC4M		20	129	170	-40 to 150	150	0.59	10	5	340	1.2	MTO-3P	46-1
SF30JC4	30	106	250	-55 to 150	150	0.61	15	0.7	560	2.0	FTO-220	48-1	
SF30SC4	30	102	300	-55 to 150	150	0.55	15	10	590	2	FTO-220	48-1	
S30SC4M	30	126	300	-40 to 150	150	0.55	15	10	590	1	MTO-3P	46-1	
D30SC4M	30	112	300	-40 to 150	150	0.55	15	10	590	1.6	ITO-3P	44-1	
S60SC4M	60	126	500	-40 to 150	150	0.55	30	25	1000	0.5	MTO-3P	46-1	
D4SC6M	4	138	60	-40 to 150	150	0.58	2	2	120	3.3	ITO-220	42-1	
D10SC6M	10	120	100	-40 to 150	150	0.58	5	4.5	200	3.3	ITO-220	42-1	
SF10JC6	10	129	100	-55 to 150	150	0.69	5	0.7	200	2.3	FTO-220	48-1	
SF10SC6	10	129	150	-55 to 150	150	0.58	5	4.5	260	2.3	FTO-220	48-1	
SF15JC6	15	123	150	-55 to 150	150	0.69	7.5	0.7	270	2.0	FTO-220	48-1	
SF15SC6	15	122	160	-55 to 150	150	0.63	7.5	6	260	2.0	FTO-220	48-1	
SF20JC6	20	115	200	-55 to 150	150	0.69	10	0.7	335	2.0	FTO-220	48-1	
SF20SC6	20	118	230	-55 to 150	150	0.63	10	8	370	1.8	FTO-220	48-1	
S25SC6M	25	128	300	-40 to 150	150	0.58	12.5	10	490	1	MTO-3P	46-1	
D25SC6M	25	117	300	-40 to 150	150	0.58	12.5	10	490	1.5	ITO-3P	44-1	
SF30JC6	30	97	250	-55 to 150	150	0.69	15	0.7	490	2.0	FTO-220	48-1	
SF30SC6	30	107	250	-55 to 150	150	0.63	15	10	500	1.6	FTO-220	48-1	
S60SC6M	60	118	500	-40 to 150	150	0.67	30	20	850	0.5	MTO-3P	46-1	
D10SC9M	10	111	100	-40 to 150	150	0.75	5	3.0	185	3.3	ITO-220	42-1	
SF10SC9	10	120	100	-40 to 150	150	0.75	5	3.0	185	2.3	FTO-220	48-1	
SF20SC9	20	100	230	-55 to 150	150	0.75	10	10	370	2.0	FTO-220	48-1	
S20SC9M	20	125	200	-40 to 150	150	0.75	10	10	370	1	MTO-3P	46-1	
D20SC9M	20	111	200	-40 to 150	150	0.75	10	10	370	1.6	ITO-3P	44-1	
SF15JC10	15	124	150	-55 to 150	150	0.86	7.5	0.6	200	2.0	FTO-220	48-1	
S20JC10	20	128	200	-55 to 150	150	0.86	10	0.7	260	1.2	MTO-3P	46-1	
SF20JC10	20	114	200	-55 to 150	150	0.86	10	0.7	260	2.0	FTO-220	48-1	
S30JC10	30	123	300	-55 to 150	150	0.86	15	1.0	390	1.0	MTO-3P	46-1	
SF30JC10	30	97	300	-55 to 150	150	0.86	15	1.0	390	2.0	FTO-220	48-1	
☆SF10NC15M	10	129	100	-55 to 150	150	0.88	5	0.2	110	2.3	FTO-220A	50-1	
☆SF15NC15M	15	123	150	-55 to 150	150	0.88	7.5	0.3	155	2.0	FTO-220A	50-1	
☆SF20NC15M	20	118	200	-55 to 150	150	0.88	10	0.4	200	1.8	FTO-220A	50-1	
☆SF30NC15M	30	107	300	-55 to 150	150	0.88	15	0.5	300	1.6	FTO-220A	50-1	
☆S30NC15	30	123	300	-55 to 150	150	0.88	15	0.5	300	1.0	MTO-3P	46-1	

☆: New product

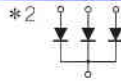
Center-tap

# SBD Module



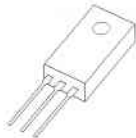
Module

Type No.	Absolute Maximum Ratings						Electrical Characteristics					Remarks	Outline	
	VRM	Io	Conditions Tc [°C]	IFSM	Tstg	Tj	VF	Conditions IF [A]	IR	Cj	θjc		Package	Fig.
	[V]	[A]					(max)							
D120SC4M	40	120	90	800	-40 to 125	125	0.58	60	40	2.1	0.34	*1	Module	77
D180SC4M		180	83	800	-40 to 125	125	0.58	60	40	2.1	0.25	*2	Module	79-1
D240SC4M		240	77	1600	-40 to 125	125	0.6	120	80	4.2	0.23	*1	Module	77
D360SC4M		360	64	1600	-40 to 125	125	0.6	120	80	4.2	0.18	*2	Module	79-1
D120SC6M	60	120	85	800	-40 to 125	125	0.67	60	40	2.2	0.34	*1	Module	77
D180SC6M		180	78	800	-40 to 125	125	0.67	60	40	2.2	0.25	*2	Module	79-1
D240SC6M		240	71	1600	-40 to 125	125	0.67	120	80	4.4	0.23	*1	Module	77
D360SC6M		360	58	1600	-40 to 125	125	0.67	120	80	4.4	0.18	*2	Module	79-1

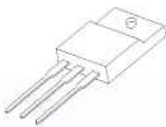


## Center Tap, Common Anode

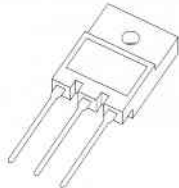
### Three Terminal Type



ITO-220

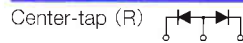


FTO-220



ITO-3P

Type No.	Absolute Maximum Ratings						Electrical Characteristics					Outline	
	VRM	Io	Conditions Tc [°C]	IFSM	Tstg	Tj	VF	Conditions IF [A]	IR	Cj	θjc	Package	Fig.
	[V]	[A]					(max)						
D5SC4MR	40	5	136	50	-40 to 150	150	0.55	2.5	2.5	116	3.3	ITO-220	42-2
D10SC4MR		10	123	100	-40 to 150	150	0.55	5	3.5	180	3.3	ITO-220	42-2
SF10SC4R		10	131	150	-40 to 150	150	0.55	5	3.5	180	2.3	FTO-220	48-2
D10SC6MR	60	10	120	100	-40 to 150	150	0.58	5	4.5	200	3.3	ITO-220	42-2
D25SC6MR		25	117	300	-40 to 150	150	0.58	12.5	10	490	1.5	ITO-3P	44-2



## Doubler

### Three Terminal Type



ITO-220

Type No.	Absolute Maximum Ratings						Electrical Characteristics					Outline	
	VRM [V]	Io [A]	Conditions Tc [°C]	IFSM [A]	Tstg [°C]	Tj [°C]	VF (max) [V]	Conditions IF [A]	IR (max) VR=VRM [mA]	Cj (typ) [pF]	θjc (max) [°C/W]	Package	Fig.
D10SD6M	60	10	120	100	-40 to 150	150	0.58	5	4.5	200	3.3	ITO-220	42-3

Doubler type

## Array

### Surface Mount



1Z

Type No.	Absolute Maximum Ratings						Electrical Characteristics					Outline	
	VRM [V]	Io [A]	Conditions Ta [°C]	IFSM [A]	Tstg [°C]	Tj [°C]	VF (max) [V]	Conditions IF [A]	IR (max) VR=VRM [mA]	Cj (typ) [pF]	θjl (max) [°C/W]	Package	Fig.
S1ZAS4	40	1.2	49	40	-40 to 150	150	0.55	1.0	1	65	93	1Z	23-2

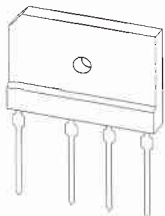
Array type

## Schottky Barrier Diode Bridges

### Single Inline Package



3S



5S

Type No.	Absolute Maximum Ratings						Electrical Characteristics					Outline	
	VRM [V]	Io [A]	Conditions Tc [°C]	IFSM [A]	Tstg [°C]	Tj [°C]	VF (max) [V]	Conditions IF [A]	IR (max) VR=VRM [mA]	Cj (typ) [pF]	θjc (max) [°C/W]	Package	Fig.
D4SBS4	40	4	116	60	-55 to 150	150	0.55	2	2	95	5.5	3S	57
D4SBS6	60	4	114	60	-40 to 150	150	0.62	2	2	180	5.5		
D10SBS4	40	10	67	100	-55 to 150	150	0.55	5	3.5	180	5.5		
D15XBS6	60	15	59	150	-55 to 150	150	0.63	7.5	6	410	3.5	5S	58
☆D20XBS6	60	20	100	200	-55 to 150	150	0.63	10	8	370	1.5		
☆D4SBN20	200	4	103	60	-55 to 150	150	0.9	2	0.0015	60	6	5S	58
☆D6SBN20	200	6	110	120	-55 to 150	150	0.9	3	0.002	85	3.4		
☆D15XBN20	200	15	106	200	-55 to 150	150	0.9	7.5	0.005	190	1.5	5S	58
☆D30XBN20	200	30	91	350	-55 to 150	150	0.9	15	0.01	360	1		

☆: New product