

SCHOTTKY BARRIER RECTIFIERS

OPERATING TEMPERATURE RANGE
 20V to 45V: -65°C to +125°C
 50V to 60V: -65°C to +150°C
 STORAGE TEMPERATURE -65°C to +150°C

TYPE	Maximum Peak Reverse Voltage	Maximum Average Rectified Current @Half-Wave Resistive Load 60Hz		Maximum Forward Peak Surge Current @ 8.3ms Superimposed	Maximum Reverse Current @ PRV @ 25°C T _A	Maximum Forward Voltage @ 25°C T _A	
	PRV	I _o @ T _L *		I _{FM} (Surge)	I _R	I _{FM}	V _{FM}
	V _{PK}	A _{AV}	°C	A _{PK}	mAdc	A _{PK}	V _{PK}

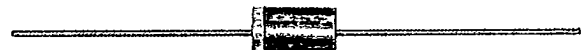
T_L* Lead Temp. @3/8" From Body

**1.0 AMPERE-SCHOTTKY/DO-41 (CASE 4)**

IN5817	20	1.0	90	25	1.0	1.0	0.45
IN5818	30	1.0	90	25	1.0	1.0	0.55
IN5819	40	1.0	90	25	1.0	1.0	0.60
SR120	20	1.0	75	40	1.0	1.0	0.55
SR130	30	1.0	75	40	1.0	1.0	0.55
SR140	40	1.0	75	40	1.0	1.0	0.55
SR150	50	1.0	100	40	1.0	1.0	0.70
SR160	60	1.0	100	40	1.0	1.0	0.70

**3.0 AMPERES-SCHOTTKY/DO-201AD (CASE 7)**

IN5820	20	3.0	95	80	2.0	3.0	0.475
IN5821	30	3.0	95	80	2.0	3.0	0.500
IN5822	40	3.0	95	80	2.0	3.0	0.525
SR320	20	3.0	75	150	3.0	3.0	0.55
SR330	30	3.0	75	150	3.0	3.0	0.55
SR340	40	3.0	75	150	3.0	3.0	0.55
SR350	50	3.0	100	150	3.0	3.0	0.75
SR360	60	3.0	100	150	3.0	3.0	0.75

**5.0 AMPERES-SCHOTTKY/DO-201AD (CASE 7)**

SR520	20	5.0	60	200	10	5.0	0.57
SR530	30	5.0	60	200	10	5.0	0.57
SR540	40	5.0	60	200	10	5.0	0.57
SR550	50	5.0	85	200	10	5.0	0.70
SR560	60	5.0	85	200	10	5.0	0.70

**8.0 AMPERES-SCHOTTKY/TO-220A (CASE 9)**

SR820	20	8.0	*90	150	5.0	8.0	0.65
SR830	30	8.0	*90	150	5.0	8.0	0.65
SR835	35	8.0	*90	150	5.0	8.0	0.65
SR840	40	8.0	*90	150	5.0	8.0	0.65
SR845	45	8.0	*90	150	5.0	8.0	0.65
SR850	50	8.0	*115	150	5.0	8.0	0.75
SR860	60	8.0	*115	150	5.0	8.0	0.75

NOTE: 1. Suffix "R" for Reverse Polarity.
 2. "*" Case Temperature Measured At Metal Tap.

SCHOTTKY BARRIER RECTIFIERS

OPERATING TEMPERATURE RANGE

20V to 45V: -65°C to +125°C

50V to 60V: -65°C to +150°C

STORAGE TEMPERATURE -65°C to +150°C

TYPE	Maximum Peak Reverse Voltage	Maximum Average Rectified Current @ Half-Wave Resistive Load 60Hz		Maximum Forward Peak Surge Current @ 8.3ms Superimposed	Maximum Reverse Current @ PRV @ 25°C TA		Maximum Forward Voltage @ 25°C TA	
	PRV	I _o @ T _C		I _{FM} (Surge)	I _R @ T _C		I _{FM}	V _{FM}
	V _{PK}	AAV	°C	APK	mAdc	°C	APK	V _{PK}

**10 AMPERES-SCHOTTKY/TO-220A (CASE 9)**

SR1020	20	10	135	150	0.1	25	20	0.84
SR1030	30	10	135	150	0.1	25	20	0.84
SR1035	35	10	135	150	0.1	25	20	0.84
SR1040	40	10	135	150	0.1	25	20	0.84
SR1045	45	10	135	150	0.1	25	20	0.84
SR1050	50	10	135	150	0.1	25	20	0.84
SR1060	60	10	135	150	0.1	25	20	0.84

NOTE: 1. Suffix "R" for Reverse Polarity

2. Operating Temperature Range: -65°C to +150°C

**16 AMPERES-SCHOTTKY/TO-220 (CASE 10)**

SR1620	20	16	90	150	10	25	8.0	0.65
SR1630	30	16	90	150	10	25	8.0	0.65
SR1635	35	16	90	150	10	25	8.0	0.65
SR1640	40	16	90	150	10	25	8.0	0.65
SR1645	45	16	90	150	10	25	8.0	0.65
SR1650	50	16	115	150	10	25	8.0	0.75
SR1660	60	16	115	150	10	25	8.0	0.75

NOTE: Suffix "C" = Common Cathode, "A" = Common Anode,

**30 AMPERES-SCHOTTKY/TO-247 (CASE 11)**

SR3020	20	30	75	300	10	25	15	0.65
SR3030	30	30	75	300	10	25	15	0.65
SR3035	35	30	75	300	10	25	15	0.65
SR3040	40	30	75	300	10	25	15	0.65
SR3045	45	30	75	300	10	25	15	0.65
SR3050	50	30	100	300	10	25	15	0.75
SR3060	60	30	100	300	10	25	15	0.75

NOTE: Suffix "C" = Common Cathode, "A" = Common Anode,

**50 AMPERES-SCHOTTKY/TO-247 (CASE 11)**

SR5020	20	50	100	400	10	25	25	0.65
SR5030	30	50	100	400	10	25	25	0.65
SR5035	35	50	100	400	10	25	25	0.65
SR5040	40	50	100	400	10	25	25	0.65
SR5045	45	50	100	400	10	25	25	0.65
SR5050	50	50	125	400	10	25	25	0.75

NOTE: Suffix "C" = Common Cathode, "A" = Common Anode.

SUPER FAST RECTIFIERSOPERATING AND STORAGE TEMPERATURE -65°C to $+150^{\circ}\text{C}$

TYPE	Maximum Peak Reverse Voltage	Maximum Average Rectified Current @ Half-Wave Resistive Load 60Hz		Maximum Forward Peak Surge Current @ 8.3ms Superimposed	Maximum Reverse Current @ PRV @ 25°C T_A	Maximum Forward Voltage @ 25°C T_A		Maximum Reverse Recovery Time
	PRV	I_o @ T_A		I_{FM} (Surge)	I_R	I_{FM}	V_{FM}	T_{rr}
	VPK	AAV	$^{\circ}\text{C}$	APK	μA_{dc}	APK	VPK	nS

1.0 AMPERE-SUPER FAST/DO-41 (CASE 4)

SF11	50	1.0	55	30	5.0	1.0	0.95	35
SF12	100	1.0	55	30	5.0	1.0	0.95	35
SF13	150	1.0	55	30	5.0	1.0	0.95	35
SF14	200	1.0	55	30	5.0	1.0	0.95	35
SF15	300	1.0	55	30	5.0	1.0	1.25	35
SF16	400	1.0	55	30	5.0	1.0	1.25	35

2.0 AMPERES-SUPER FAST/DO-15 (CASE 5)

SF21	50	2.0	55	75	5.0	2.0	0.95	35
SF22	100	2.0	55	75	5.0	2.0	0.95	35
SF23	150	2.0	55	75	5.0	2.0	0.95	35
SF24	200	2.0	55	75	5.0	2.0	0.95	35
SF25	300	2.0	55	75	5.0	2.0	1.25	35
SF26	400	2.0	55	75	5.0	2.0	1.25	35

3.0 AMPERES-SUPER FAST/DO-201AD (CASE 7)

SF31	50	3.0	55	125	5.0	3.0	0.95	35
SF32	100	3.0	55	125	5.0	3.0	0.95	35
SF33	150	3.0	55	125	5.0	3.0	0.95	35
SF34	200	3.0	55	125	5.0	3.0	0.95	35
SF35	300	3.0	55	125	5.0	3.0	1.25	35
SF36	400	3.0	55	125	5.0	3.0	1.25	35

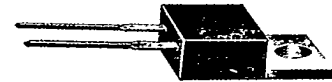
5.0 AMPERES-SUPER FAST/DO-201AD (CASE 7)

SF51	50	5.0	55	150	5.0	5.0	0.95	35
SF52	100	5.0	55	150	5.0	5.0	0.95	35
SF53	150	5.0	55	150	5.0	5.0	0.95	35
SF54	200	5.0	55	150	5.0	5.0	0.95	35
SF55	300	5.0	55	150	5.0	5.0	1.25	35
SF56	400	5.0	55	150	5.0	5.0	1.25	35

SUPER FAST RECTIFIERS

OPERATING AND STORAGE TEMPERATURE -65°C to +150°C

TYPE	Maximum Peak Reverse Voltage	Maximum Average Rectified Current @ Half-Wave Resistive Load 60 Hz		Maximum Forward Peak Surge Current @ 8.3ms Superimposed	Maximum Reverse Current @ PRV @ 25° C T _A	Maximum Forward Voltage @ 25° C T _A		Maximum Reverse Recovery Time
	PRV	I _o @ T _C		I _{FM} (Surge)	I _R	I _{FM}	V _{FM}	T _{rr}
	V _{PK}	A _{AV}	°C	A _{PK}	μA _{dc}	A _{PK}	V _{PK}	nS



8.0 AMPERES-SUPER FAST/TO-220A (CASE 9)

SF81	50	8.0	*100	125	10	8.0	0.975	35
SF82	100	8.0	*100	125	10	8.0	0.975	35
SF83	150	8.0	*100	125	10	8.0	0.975	35
SF84	200	8.0	*100	125	10	8.0	0.975	35
SF85	300	8.0	*100	125	10	8.0	1.30	50
SF86	400	8.0	*100	125	10	8.0	1.30	50

NOTE: Suffix "R" for Reverse Polarity.



16 AMPERES-SUPER FAST/TO-220 (CASE 10)

SF161	50	16	125	125	10	8.0	0.975	35
SF162	100	16	125	125	10	8.0	0.975	35
SF163	150	16	125	125	10	8.0	0.975	35
SF164	200	16	125	125	10	8.0	0.975	35
SF165	300	16	125	125	10	8.0	1.30	50
SF166	400	16	125	125	10	8.0	1.30	50

NOTE: Suffix "C" = Common Cathode, "A" = Common Anode,



30 AMPERES-SUPER FAST/TO-247 (CASE 11)

SF301	50	30	100	300	10	15	0.95	35
SF302	100	30	100	300	10	15	0.95	35
SF303	150	30	100	300	10	15	0.95	35
SF304	200	30	100	300	10	15	0.95	35

NOTE: Suffix "C" = Common Cathode, "A" = Common Anode

HIGH EFFICIENCY RECTIFIERSOPERATING AND STORAGE TEMPERATURE -65°C to $+150^{\circ}\text{C}$

TYPE	Maximum Peak Reverse Voltage	Maximum Average Rectified Current @ Half-Wave Resistive Load 60Hz		Maximum Forward Peak Surge Current @ 8.3ms Superimposed	Maximum Reverse Current @ PRV @ 25°C T_A	Maximum Forward Voltage @ 25°C T_A		Maximum Reverse Recovery Time
	PRV	I_o @ T_A		I_{FM} (Surge)	I_R	I_{FM}	V_{FM}	T_{rr}
	V _{PK}	A _{AV}	$^{\circ}\text{C}$	A _{PK}	μA_{dc}	A _{PK}	V _{PK}	nS

1.0 AMPERE-HIGH EFFICIENCY/DO-41 (CASE 4)

HER101	50	1.0	50	50	5.0	1.0	1.0	50
HER102	100	1.0	50	50	5.0	1.0	1.0	50
HER103	200	1.0	50	50	5.0	1.0	1.0	50
HER104	300	1.0	50	50	5.0	1.0	1.3	50
HER105	400	1.0	50	50	5.0	1.0	1.3	50
HER106	600	1.0	50	40	5.0	1.0	1.5	70
HER107	800	1.0	50	40	5.0	1.0	1.7	70
HER108	1000	1.0	50	40	5.0	1.0	1.7	70

2.0 AMPERES-HIGH EFFICIENCY/DO-15 (CASE 5)

HER201	50	2.0	50	60	5.0	2.0	1.0	50
HER202	100	2.0	50	60	5.0	2.0	1.0	50
HER203	200	2.0	50	60	5.0	2.0	1.0	50
HER204	300	2.0	50	60	5.0	2.0	1.3	50
HER205	400	2.0	50	60	5.0	2.0	1.3	50
HER206	600	2.0	50	60	5.0	2.0	1.5	70
HER207	800	2.0	50	60	5.0	2.0	1.7	70
HER208	1000	2.0	50	60	5.0	2.0	1.7	70

3.0 AMPERES-HIGH EFFICIENCY/DO-201AD (CASE 7)

HER301	50	3.0	50	200	10	3.0	1.0	50
HER302	100	3.0	50	200	10	3.0	1.0	50
HER303	200	3.0	50	200	10	3.0	1.0	50
HER304	300	3.0	50	200	10	3.0	1.3	50
HER305	400	3.0	50	200	10	3.0	1.3	50
HER306	600	3.0	50	150	10	3.0	1.5	70
HER307	800	3.0	50	150	10	3.0	1.7	70
HER308	1000	3.0	50	150	10	3.0	1.7	70

HIGH EFFICIENCY RECTIFIERS

OPERATING AND STORAGE TEMPERATURE -65°C to $+150^{\circ}\text{C}$

TYPE	Maximum Peak Reverse Voltage	Maximum Average Rectified Current @ Half-Wave Resistive Load 60Hz		Maximum Forward Peak Surge Current @ 8.3ms Superimposed	Maximum Reverse Current @ PRV @ 25°C T_A	Maximum Forward Voltage @ 25°C T_A		Maximum Reverse Recovery Time
	PRV	$I_o @ T_A$		I_{FM} (Surge)	I_R	I_{FM}	V_{FM}	T_{rr}
	V _{PK}	A _{AV}	$^{\circ}\text{C}$	A _{PK}	μA_{dc}	A _{PK}	V _{PK}	nS



5.0 AMPERES-HIGH EFFICIENCY/DO-201AD (CASE 7)

HER501	50	5.0	50	200	10	5.0	1.0	50
HER502	100	5.0	50	200	10	5.0	1.0	50
HER503	200	5.0	50	200	10	5.0	1.0	50
HER504	300	5.0	50	200	10	5.0	1.3	50
HER505	400	5.0	50	200	10	5.0	1.3	50
HER506	600	5.0	50	200	10	5.0	1.5	70
HER507	800	5.0	50	200	10	5.0	1.7	70
HER508	1000	5.0	50	200	10	5.0	1.7	70



8.0 AMPERES-HIGH EFFICIENCY/TO-220A (CASE 9)

HER801	50	8.0	*75	200	10	8.0	1.0	50
HER802	100	8.0	*75	200	10	8.0	1.0	50
HER803	200	8.0	*75	200	10	8.0	1.0	50
HER804	300	8.0	*75	200	10	8.0	1.3	50
HER805	400	8.0	*75	200	10	8.0	1.3	50

NOTE: 1. Suffix "R" for Reverse Polarity.

2. "*" Case Temperature Measured At Metal Tap.



16 AMPERES-HIGH EFFICIENCY/TO-220 (CASE 10)

HER1601	50	16	*75	200	10	8.0	1.0	50
HER1602	100	16	*75	200	10	8.0	1.0	50
HER1603	200	16	*75	200	10	8.0	1.0	50
HER1604	300	16	*75	200	10	8.0	1.3	50
HER1605	400	16	*75	200	10	8.0	1.3	50

NOTE: 1. Suffix "C" = Common Cathode, "A" = Common Anode.

2. "*" Case Temperature Measured At Metal Tap.



30 AMPERES-HIGH EFFICIENCY/TO-247 (CASE 11)

HER3001	50	30	*75	300	10	15	1.0	50
HER3002	100	30	*75	300	10	15	1.0	50
HER3003	200	30	*75	300	10	15	1.0	50

NOTE: 1. Suffix "C" = Common Cathode, "A" = Common Anode.

2. "*" Case Temperature Measured At Metal Tap.