

# 4-3 Ultrafast Recovery Diodes

## ●Surface-Mount

V <sub>RM</sub> (V)	I <sub>F</sub> (AV) (A) <small>Values in parentheses are for the products with heatsinks</small>	Package	Part Number	I <sub>FSM</sub> (A)	T <sub>j</sub> (°C)	T <sub>stg</sub> (°C)	V <sub>F</sub> (V) max	I <sub>F</sub> (A)	I <sub>R</sub> (μA)	I <sub>R</sub> (H) (mA)	T <sub>a</sub> (°C)	trr <sup>①</sup> (ns)	I <sub>F</sub> /I <sub>RP</sub> (mA)	trr <sup>②</sup> (ns)	I <sub>F</sub> /I <sub>RP</sub> (mA)	R <sub>th(j-l)</sub> (°C/W)	Mass (g)
				50Hz <small>Single Half Sine Wave</small>					V <sub>R</sub> =V <sub>RM</sub> max	V <sub>R</sub> =V <sub>RM</sub> max							
200	1.0	Surface-Mount (SJP)	SJPL-D2	25	-40 to +150	0.98	1.0	10	1	150	50	100/100	35	100/200	20	0.072	
	1.5	Surface-Mount (SJP)	SJPX-F2*	30	-40 to +150	0.98	1.5	10	2	150	30	100/100	25	100/200	20	0.072	
	2.0	Surface-Mount (SJP)	SJPL-H2	25	-40 to +150	0.98	2.0	10	1	150	50	100/100	35	100/200	20	0.072	
	3.0	Surface-Mount (D pack)	SPX-G32S	50	-40 to +150	0.98	3.0	50	10	100	30	100/100	25	100/200	5.0	0.41	
	6.0	Surface-Mount (D pack)/Center-tap	SPX-62S	80	-40 to +150	0.98	3.0	50	10	100	30	100/100	25	100/200	5.0	0.41	
10.0	Surface-Mount (TO220S)	MPL-102S	65	-40 to +150	0.98	5.0	100	0.2	150	40	100/100	30	100/200	2.5	1.4		
300	2.0	Surface-Mount (SJP)	SJPX-H3*	20	-40 to +150	1.3	2.0	50	3	150	30	100/100	25	100/200	20	0.072	
400	1.5	Surface-Mount(SJP)	SJPL-F4	25	-40 to +150	1.3	1.5	10	0.05	150	50	100/100	35	100/200	20	0.072	
	3.0	Surface-Mount(SJP)	SJPL-L4	30	-40 to +150	1.3	3.0	10	0.05	150	50	100/100	35	100/200	20	0.072	
	10.0	Surface-Mount(TO263)	MPXA-1104S	100	-40 to +150	1.5	10.0	100	30	150(T <sub>j</sub> )	25	100/100	-	-	2.5	1.04	
600	2.0	Surface-Mount (SJP)	SJPX-H6	20	-40 to +150	1.5	2.0	10	3	150	30	100/100	20	100/200	20	0.072	
	3.0	Surface-Mount (TO263)	MPL-1036S	50	-40 to +150	1.75	3.0	50	0.1	150(T <sub>j</sub> )	50	100/100	-	-	2.5	1.4	
	10.0	Surface-Mount (TO263)	MPXA-1106S	100	-40 to +150	1.98	10.0	100	30	150(T <sub>j</sub> )	28	500/500	-	-	2.5	1.4	

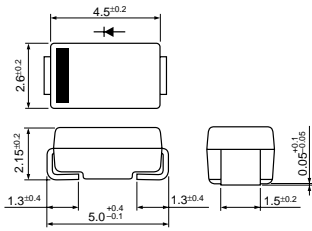
\*: Under Development

## ●Thru-Hole

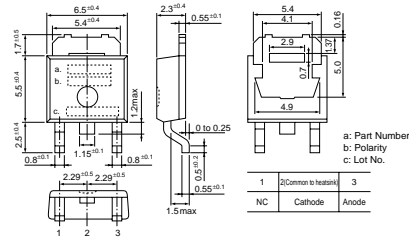
V <sub>RM</sub> (V)	I <sub>F</sub> (AV) (A) <small>Values in parentheses are for the products with heatsinks</small>	Package Axial <small>Body Diameter/Lead Diameter</small>	Part Number	I <sub>FSM</sub> (A)	T <sub>j</sub> (°C)	T <sub>stg</sub> (°C)	V <sub>F</sub> (V) max	I <sub>F</sub> (A)	I <sub>R</sub> (μA)	I <sub>R</sub> (H) (mA)	T <sub>a</sub> (°C)	trr <sup>①</sup> (μs)	I <sub>F</sub> /I <sub>RP</sub> (mA)	trr <sup>②</sup> (μs)	I <sub>F</sub> /I <sub>RP</sub> (mA)	R <sub>th(j-l)</sub> R <sub>th(j-c)</sub> (°C/W)	Mass (g)
				50Hz <small>Single Half Sine Wave</small>					V <sub>R</sub> =V <sub>RM</sub> max	V <sub>R</sub> =V <sub>RM</sub> max							
70	1.0	Axial(φ2.4/φ0.6)	AG01Y	25	-40 to +150	1.2	1.0	100	0.5	100	100	100/100	50	100/200	22	0.13	
	1.0	Axial(φ2.7/φ0.6)	EG01Y	30	-40 to +150	1.2	1.0	100	0.5	100	100	100/100	50	100/200	20	0.2	
	1.1	Axial(φ2.7/φ0.78)	EG 1Y	30	-40 to +150	1.2	1.1	100	0.5	100	100	100/100	50	100/200	17	0.3	
	1.5	Axial(φ4.0/φ0.78)	RG 10Y	50	-40 to +150	1.1	1.5	500	2.5	100	100	100/100	50	100/200	15	0.4	
	1.5	Axial(φ4.0/φ0.98)	RG 2Y	50	-40 to +150	1.1	1.5	500	2.5	100	100	100/100	50	100/200	12	0.6	
	2.0(3.5)	Axial(φ6.5/φ1.4)	RG 4Y	100	-40 to +150	1.3	3.5	1000	5	100	100	100/100	50	100/200	8	1.2	
200	0.7	Axial(φ2.4/φ0.6)	AG01Z	15	-40 to +150	1.8	0.7	100	0.5	100	100	100/100	50	100/200	22	0.13	
	0.7	Axial(φ2.7/φ0.6)	EG01Z	15	-40 to +150	1.9	0.7	50	0.3	100	100	100/100	50	100/200	20	0.2	
	0.8	Axial(φ2.7/φ0.78)	EG 1Z	15	-40 to +150	1.7	0.8	50	0.3	100	100	100/100	50	100/200	17	0.3	
	1.0	Axial(φ2.4/φ0.6)	AL01Z	25	-40 to +150	0.98	1.0	100	0.5	100	50	100/100	35	100/200	22	0.13	
	1.0	Axial(φ2.7/φ0.6)	EN 01Z	50	-40 to +150	0.92	1.0	10	2	150(T <sub>j</sub> )	100	100/100	50	100/200	20	0.2	
	1.2	Axial(φ4.0/φ0.78)	RG 10Z	50	-40 to +150	1.5	1.2	500	2.5	100	100	100/100	50	100/200	15	0.4	
	1.2	Axial(φ4.0/φ0.98)	RG 2Z	50	-40 to +150	1.5	1.5	500	2.5	100	100	100/100	50	100/200	12	0.6	
	1.5	Axial(φ2.7/φ0.78)	EL 1Z	20	-40 to +150	0.98	1.5	100	0.5	100	100	100/100	50	100/200	17	0.3	
	1.5	Axial(φ2.7/φ0.6)	EL02Z	25	-40 to +150	0.98	1.5	50	0.1	100	40	100/100	30	100/200	20	0.2	
	1.5	Axial(φ4.0/φ0.78)	RN 1Z	60	-40 to +150	0.92	1.5	20	3	150(T <sub>j</sub> )	100	100/100	50	100/200	15	0.4	
	2.0	Axial(φ4.0/φ0.78)	RX 10Z	30	-40 to +150	0.98	2.0	50	3	150(T <sub>j</sub> )	30	100/100	25	100/200	15	0.4	
	2.0	Axial(φ4.0/φ0.78)	RL 10Z	30	-40 to +150	0.98	2.0	50	0.1	100	50	100/100	35	100/200	15	0.4	
	2.0	Axial(φ4.0/φ0.98)	RL 2Z	30	-40 to +150	0.98	2.0	100	0.5	100	50	100/100	35	100/200	12	0.6	
	2.0	Axial(φ4.0/φ0.98)	RN 2Z	70	-40 to +150	0.92	2.0	50	4	150(T <sub>j</sub> )	100	100/100	50	100/200	12	0.6	
	3.0	Axial(φ5.2/φ1.2)	RX 3Z	80	-40 to +150	0.98	3.0	50	10	100	30	100/100	25	100/200	10	1.0	
	3.0	Axial(φ5.2/φ1.2)	RN 3Z	80	-40 to +150	0.92	3.0	50	6	150(T <sub>j</sub> )	100	100/100	50	100/200	10	0.6	
	1.0(3.0)	Axial(φ6.5/φ1.4)	RG 4ZS	80	-40 to +150	1.7	3.0	1000	5	100	100	100/100	50	100/200	8	1.2	
	3.5	Axial(φ5.2/φ1.2)	RL 3Z	80	-40 to +150	0.95	3.5	50	0.2	100	50	100/100	35	100/200	10	1.0	
	3.5	Axial(φ6.5/φ1.4)	RL 4Z	80	-40 to +150	0.95	3.5	150	0.5	100	50	100/100	35	100/200	8	1.2	
	3.5	Axial(φ6.5/φ1.4)	RN 4Z	120	-40 to +150	0.92	3.5	50	6	150(T <sub>j</sub> )	100	100/100	50	100/200	8	1.2	
	5.0	TO-220F(Center-tap)	FML-12S	35	-40 to +150	0.98	2.5	150	0.5	100	40	100/100	30	100/200	4.0	2.1	
	5.0	TO-220F(Center-tap)	FMG-12S, R	35	-40 to +150	1.8	2.5	500	1.5	100	100	100/100	50	100/200	4.0	2.1	
	5.0	TO-220F(Center-tap)	FMX-12S	35	-40 to +150	0.98	2.5	50	10	100	30	100/100	25	100/200	4.0	2.1	
5.0	TO-220F2Pin	FMP-G12S	65	-40 to +150	1.15	5.0	50	0.5	100	150	100/100	70	100/200	4.0	2.1		
5.0	TO-220F2Pin	FML-G12S	65	-40 to +150	0.98	5.0	250	1	100	40	100/100	30	100/200	4.0	2.1		
5.0	TO-220F2Pin	FMX-G12S	65	-40 to +150	0.98	5.0	100	20	100	30	100/100	25	100/200	4.0	2.1		
5.0	TO-220F2Pin	FMN-G12S	100	-40 to +150	0.92	5.0	100	10	150	100	100/100	50	100/200	4.0	2.1		
10.0	TO-220F(Center-tap)	FMXA-2102ST	100	-40 to +150	1.2	5.0	100	20	150(T <sub>j</sub> )	25	500/500	-	-	4.0	2.1		

# Package Type (Dimensions)

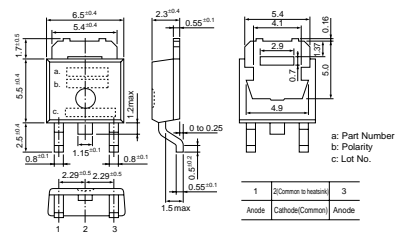
• No. 1 Surface-Mount (SJP)



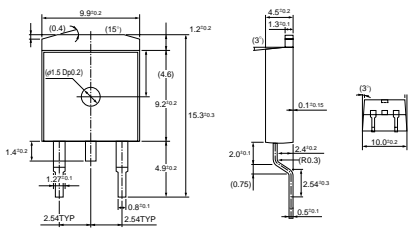
• No. 2 Surface-Mount (D pack)



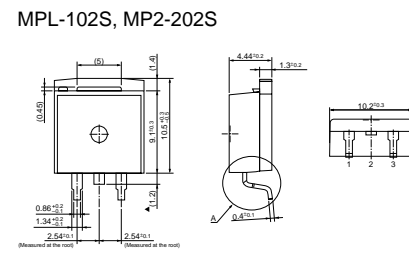
• No. 3 Surface-Mount (D pack) Center-tap



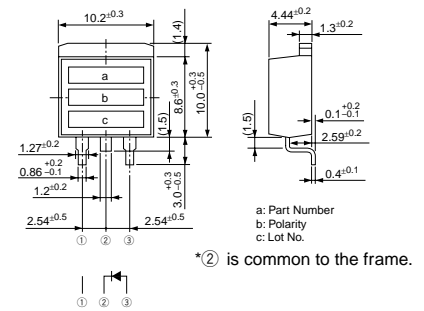
• No. 4 Surface-Mount (TO263)



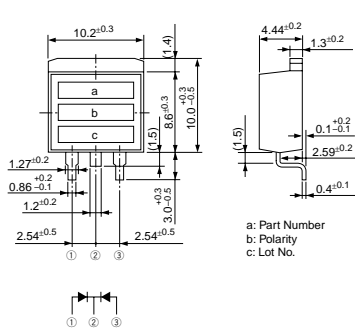
• No. 5 Surface-Mount (TO220S)



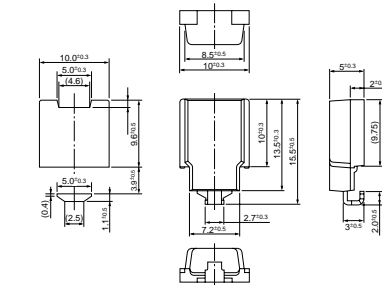
• No. 6 Surface-Mount (TO220S)



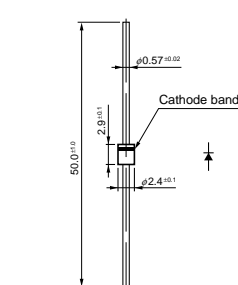
• No. 7 Surface-Mount (TO220S) Center-tap



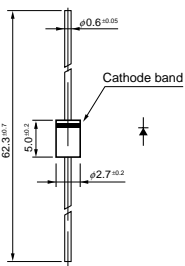
• No. 8 Surface-Mount (SZ-10)



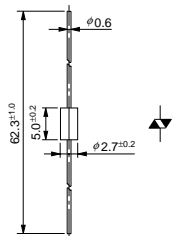
• No. 9 Axial (φ2.4/φ0.6)



• No. 10 Axial (φ2.7/φ0.6)



• No. 11 Axial (φ2.7/φ0.6)  
Silicon Varistors (Symmetrical)



• No. 12 Axial (φ2.7/φ0.78)

