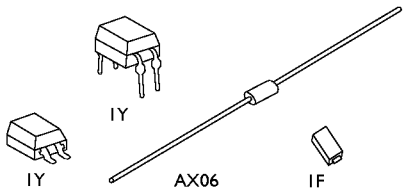
Varistors

Features
1. Bidirectional surge absorption is possible.
2. Low junction capacitance
3. SMD is available.

Application
1. Telephone set surge absorption
2. Digital communications circuit surge absorption
3. ISDN terminal surge absorption



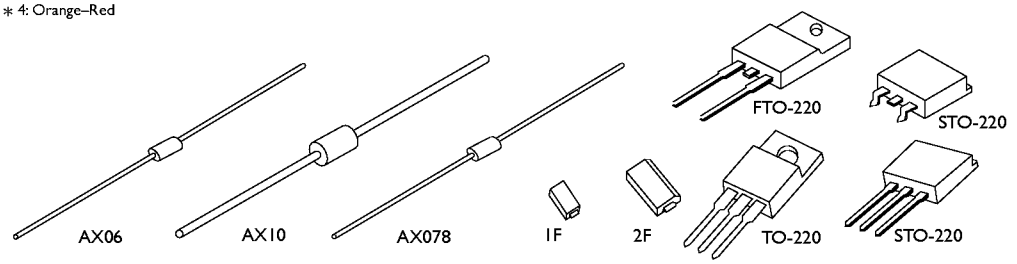
Type No.	Color Code	Absolute Maximum Ratings				Electrical Characteristics (Ta=25°C)						Outline	
		I_O	I_{FSM}	Tstg	Tj	V_{F1}	I_{F1}	V_{F2}	I_{F2}	V_{F3}	I_{F3}	Package	Figure
		[mA]	[A]	[°C]	[°C]	[V]	[mA]	[V]	[mA]	[V]	[mA]		
VR-60B(A)	Orange	500	16	–30~125	125	1.5	1000	—	—	0.2	0.02	AX06	3
-60BP(A)								0.58±0.03	1				
-51B(A)	*3	150	7.5	–30~125	125	1.8±0.25	1	2.1±0.25	10	2.4±0.25	70	AX06	4
-61B(A)	*4					2.3±0.25		2.75±0.25		3.1±0.25			
-61F1*1	—	370	7.5	–55~150	150	2.3±0.25	1	2.75±0.25	10	3.1±0.25	70	1F	72
VRYA6*2	—	310	8	–30~125	125	2.3±0.25	1	2.75±0.25	10	3.1±0.25	70	1Y	29-2
15*2		140	6.5			5.75±0.62		6.875±0.625		7.75±0.62			(SMD 30-2)

∗ 1: On alumina substrate
∗ 2: On alumina substrate, 1 element operation
∗ 3: Silver–Silver
∗ 4: Orange–Red

Trankillers

Features
1. High speed response
2. Absorption energy tolerance capacity
3. Narrow clamping voltage width

Application
1. IC protection for electronic telephones
2. IC protection against abnormal voltage



Type No.	Color Code	Absolute Maximum Ratings			Electrical Characteristics (Ta=25°C)									Outline	
		P_{RSM}	Tstg	Tj	V_{RM} (max)	V_{BR} (std)	Conditions I_R	I_R (max)	Conditions V_R	r_Z (max)	V_{CL} (max)	Conditions I_{PP}		Package	Figure
		[W]	[°C]	[°C]	[V]	[V]	[mA]	[μA]	[V]	[%/°C]	[V]	[A]			
ST02D-82	Silver	200	–40~150	150	67	82	1	5	67	—	118	1.7		AX078	5
-170	Red				145	170			145		280	0.75			
-200	Yellow				170	200			170		300	0.7			
ST03-58F1	—	300	–40~150	150	45	58	1	5	45	—	80	4		1F	72
ST03D-82	Silver	300	–40~150	150	67	82	1	5	67	—	118	2.5		AX10	6
-170	Red				145	170			145		280	1.1			
-200	Yellow				170	200			170		300	1			
SFT03D-82	—	300	–40~150	150	67	82	1	5	67	—	118	2.5		FTO-220	83-2
DL03-58F1	—	300	–40~150	150	45	58	1	5	45	—	80	4		1F	72
DL04-18F1		400			13	18			13	0.09	27	15			
ST04-16	Silver	400	–40~150	150	13.6	16	1	5	13.6	0.09	23	15		AX06	2
-27					23	27			23		37	10			
ST04-16F1	—	400	–40~150	150	13.6	16	1	5	13.6	0.09	23	15		1F	72
-27F1					23	27			23		37	10			
ST20-47F2	—	2000	–40~150	150	38	47	1	5	38	—	67	50		2F	73
ST50D-27	—	5000	–40~150	150	23	27	1	5	23	0.09	38	130		TO-220	80-5
ST50V-27F	—	5000	–40~150	150	23	27	1	5	23	0.09	40	130		STO-220	76-3
ST70-27F		7000										180			(SMD 74-4)