

UL Style 3239, CSA TV-10, 20, 30, 40, 50

105°C HIGH VOLTAGE WIRE

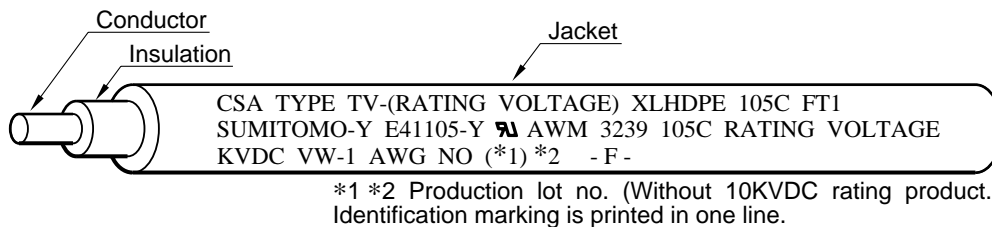
APPLICATION

These wires are used for high voltage circuits of TV receivers, OA equipment displays, TV camera, microwave ovens, copying machines and other electronic equipments.

DESCRIPTION

- 1) **Standard** : These wires are fully approved by both UL and CSA standard for 10, 20, 30, 40, and 50 KVDC at 105°C.
- 2) **Outer diameter Example** : Small finished diameter is advantageous in relation to space factor.
: For of AWG22
10KV.....2.2 mm
20KV.....3.2 mm
30KV.....3.4 mm
40KV.....4.2 mm
50KV.....5.2 mm
- 3) **Flame retardant** : These wires pass the vertical flame retardant based on UL VW-1, CSA FT1 and the Electrical Appliances and Material Control Law. They also passed the flame retardant test based on IEC Pub 246 (1967) and BS 415 (1979).
- 4) **Anti-tracking property**: These wires have superior anti-tracking property.

CONSTRUCTION



UL STYLE NO.	CSA STANDARD	RATING (UL, CSA)		CONDUCTOR (Tinned Annealed Copper Wire)			INSULATION (Heat resistance IRRAX®, natural color)		JACKET (Anti-tracing PVC)	
		TEMPERATURE (°C)	VOLTAGE (KVDC)	SIZE (AWG)	COMPOSITION (N/mm)	OUTER DIAMETER (mm)	THICKNESS (mm)	OUTER DIAMETER (mm)	THICKNESS (mm)	OUTER DIAMETER (mm)
3239	TV-10	105	10	22	7/0.26	0.78	0.31	1.40	0.40	2.2
	TV-20			22	7/0.26	0.78	0.56	1.90	0.65	3.2
			TV-30	30	20	1/0.81	0.81	0.525	1.86	0.62
	22				7/0.26	0.78	0.65	2.08	0.66	3.4
	TV-40		40	22	7/0.26	0.78	0.76	2.30	0.95	4.2
				20	1/0.81	0.81	0.76	2.33	0.935	4.2
TV-50	50	22	7/0.26	0.78	1.10	2.98	1.11	5.2		

The jacket color of AWG22 is available in red, white and black. Other sizes are in red.

ITEM		UNIT	PROPERTY	DETAILS		
Dielectric Test on Mandrel		-	No insulation break down (UL, CSA)	To withstand 1 Hr application of DC test voltage at 2.5 times the rating voltage, after wound around a specified mandrel. (UL: 2 times the rating for 30 min.)		
High Voltage Cut Through Test		-	No insulation break down (UL, CSA)	DC test voltage of 1.5 times the rating voltage shall be applied at 105°C for 7 Hrs after the wire is loaded with 450g and suspended from a U metal plate of 0.4R.		
Heat Shock Test		-	No surface cracking (UL, CSA)	To withstand 1 Hr application of heat at 136°C, after wound around a mandrel having a diameter equal to that of the wire.		
U-bend Discharge Test		-	No insulation break down (UL, CSA)	To withstand 6 Hrs application of DC test voltage at 1.5 times the rating voltage, after wound around a mandrel having a diameter equal to 4 times the overall diameter of the wire.		
Heat Shrinkage Test		mm	Max. 3.2 (UL, CSA)	A 305 mm specimen shall be subjected to a 6 Hrs air oven exposure at 136°C.		
Flame Retardant Test		-	These wires passed the vertical flame retardant test based on UL VW-1, CSA Standard C22.2 NO.16 and Electric Appliance Control Act.			
Insulation Resistance		MΩ-km	More than 1,000	Measured at 20°C		
Physical Property of Insulation	Room Temperature	Tensile Strength	kg/mm ²	More than 1.62		
		Elongation	%	More than 200		
	After Aging	Tensile Strength	%	More than 70 (retention ratio)		Aging condition: 113°C x 60 days
		Elongation	%	More than 60 (retention ratio)		
Physical Property of Jacket	Room Temperature	Tensile Strength	kg/mm ²	More than 1.06		
		Elongation	%	More than 100		
	After Aging	Tensile Strength	%	More than 70 (retention ratio)		Aging condition: 136°C x 7 days
		Elongation	%	More than 65 (retention ratio)		



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