

GENERAL DESCRIPTION

KYOCERA AVX radial leaded CapGuard® products are designed to provide both transient voltage protection and EMI/RFI suppression for electronic circuits. CapGuards® are ideally suited to filter out EMI/RFI noise generated by switch mode power supplies or motors on DC lines or I/O lines in electronic circuits. With multilayer varistor (MLV) utilized in CapGuard® product, effective transient voltage protection is achieved to protect sensitive electronics from high voltage transients. The capacitor, on the other hand, absorbs high frequency noise on the line. The MLCC capacitors are designed with temperature stable X7R dielectric, allowing for wide temperature use with good capacitance stability.

GENERAL CHARACTERISTICS

- Operating Temperature: -55 to +125°C
- Working Voltage: 26Vdc, 45Vdc
- Capacitance: 0.47µF - 4.7µF

FEATURES

- High Capacitance / EMI Filtering
- Bi-Directional Protection
- AEC Q200 qualified
- Multiple Strike Capability
- Radial, epoxy encapsulated

APPLICATIONS

- EMI filtering with surge protection
- DC motors
- Inductive switching
- Relays
- Power supplies
- I/O Ports
- and more

HOW TO ORDER

CG	21	AS	26	F	474	M	R	TR1
Series	Size	Automotive Series	Working Voltage	Energy	Capacitance	Tolerance	Leads	Packaging
	21		26 = 26Vdc 45 = 45Vdc	K = 0.6J F = 0.7J H = 1.2J	474 = 0.47µF 105 = 1.0µF 475 = 4.7µF	M = ±20%	R = RoHS Compliant	Blank = Bulk TR1 = T&R Standard 1 TR2 = T&R Standard 2



ELECTRICAL CHARACTERISTICS

Part Number	V _{WDC}	V _{WAC}	V _B	V _C	I _{VC}	I _L	E _T	E _{LD}	I _P	Cap	Tol	V _{JUMP}
CG21AS26F474MR	26.0	18.0	33.0±10%	54	1	15	0.7	1.5	200	0.47	±20%	27.5
CG21AS26F105MR	26.0	18.0	33.0±10%	54	1	15	0.7	1.5	200	1	±20%	27.5
CG21AS26H475MR	26.0	18.0	34.5±10%	60	5	15	1.2	3	300	4.7	±20%	27.5
CG21AS45K474MR	45.0	35.0	56.0±10%	90	1	15	0.6	1.25	200	0.47	±20%	48
CG21AS45K105MR	45.0	35.0	56.0±10%	90	1	15	0.6	1.25	200	1	±20%	48

V_W(DC) DC Working Voltage [V]
V_W(AC) AC Working Voltage [V]
V_B Typical Breakdown Voltage [V @ 1mA_{DC}]
V_C Clamping Voltage [V @ I_V]
I_{VC} Test Current for V_C
I_L Maximum leakage current at the working voltage [µA]

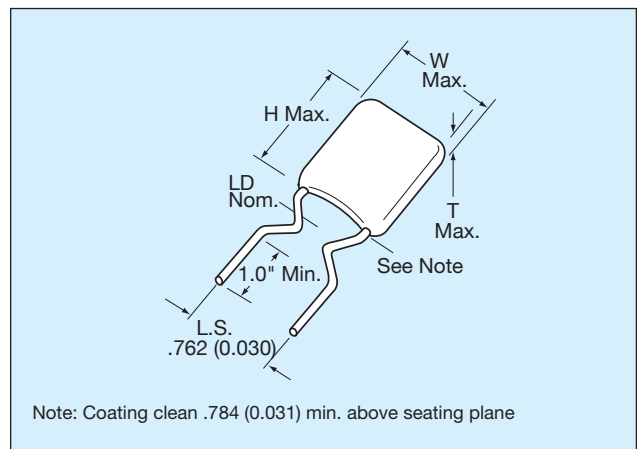
E_T Transient Energy Rating [J, 10x1000µs]
E_{LD} Load Dump Energy (x10) [J]
I_P Peak Current Rating [A, 8x20µs]
Cap Typical capacitance [pF] @ frequency specified and 0.5V_{RMS}
Tol Capacitance tolerance [%] from Typ value
V_{Jump} Jump Start (V)

Radial Leaded CapGuard®

Varistor/Capacitor Combination for EMI/Surge Suppression



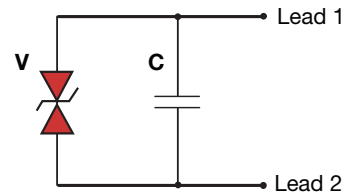
PHYSICAL DIMENSIONS



Drawings are for illustrative purposes only. Actual lead form shape could vary within stated tolerances based on body size.

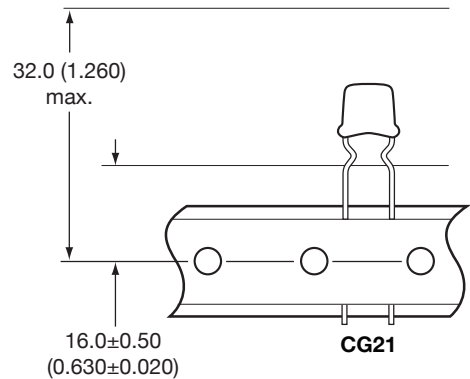
mm (inches)					
Style	Width (W)	Height (H)	Thickness (T)	Lead Spacing	Lead Diameter
CG21	6.35 Max (0.250)	8.25 Max (0.325)	5.08 Max (0.200)	5.08±0.76 (0.200±0.030)	0.508 nom. (0.020)

Schematic Diagram

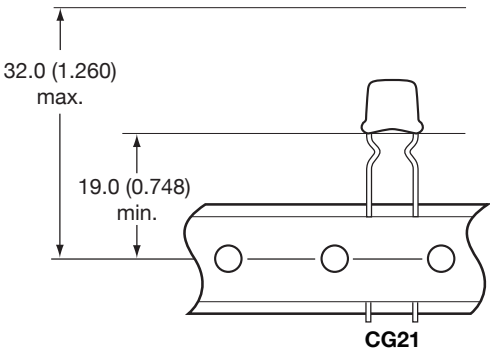


TAPE & REEL PACKAGING OPTIONS

TR1
Tape & Reel Standard 1



TR2
Tape & Reel Standard 2



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

KYOCERA AVX:

[CG21AS26F474MR](#) [CG21AS26F105MR](#) [CG21AS45K474MR](#) [CG21AS45K105MR](#)