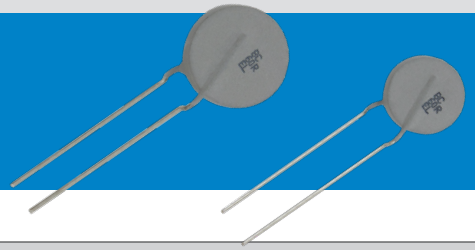
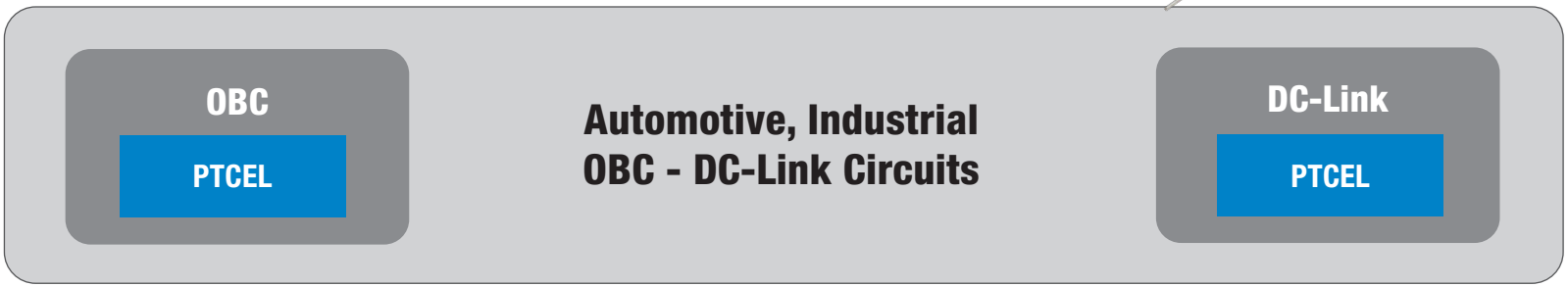
THE VISHAY ADVANTAGE AND WHY IT MATTERS...

AUTOMOTIVE UNDER THE HOOD

PTCEL, Inrush Current Limiters





Product Family	Advantage	Why it Matters (Benefit to the Engineer)	Where Should it Be Considered?	Best Parameter / Example
PTCEL13, PTCEL17 THT inrush current limiter PTC thermistors	• Higher energy absorption levels compared to linear power resistors • Highly resistant against non-switching peak power of up to 25 kW • Self-protecting and resetting in case of overload with no risk of overheating	Significantly reduce board space and component count by replacing inrush current limiting wirewound or thick film resistors. No safety issues related to overloading, failing short circuit bypass, or capacitor breakdown	All high energy applications requiring a safety charge-discharge function with built-in protection	PTCEL13R: 150 J / 2 kV_P / 850 V_{DC} PTCEL17R: 240 J / 2 kV_P / 1 kV_{DC}

Other Customer Benefits	How Is This Achieved?	Example Device / Details	Comments
• Excellent repetitive high energy absorption	• High density homogeneous bulk PTC ceramic	• PTCEL17R up to 240 J • PTCEL13R up to 150 J • 2 kV surge voltage capability (10/1000 µs)	Available in two sizes, optional PTCEL22 (400 J)