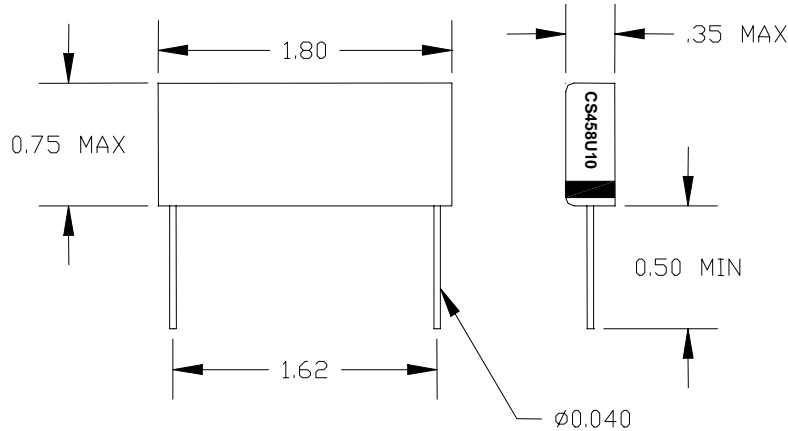


FEATURES

- Ratings to 15 kV
- Glass Passivated
- Controlled Avalanche Junctions
- High Surge Capability
- Designed for High Temperature Usage
- Small Footprint for Efficient PCB Layout
- Large Surface Area for Better Cooling During High Current Operation



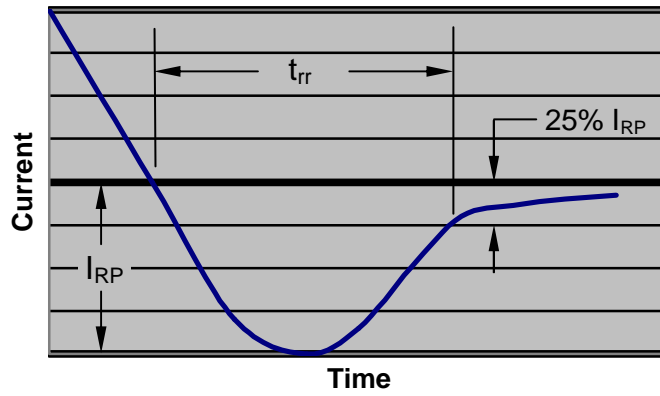
Maximum Ratings & Characteristics

ELECTRICAL RATINGS, T = 25°C		STANDARD RECOVERY				ULTRAFAST RECOVERY				UNITS
		CS 458				CS 458				
		S8	S10	S12	S15	U8	U10	U12	U15	
Repetitive Peak Reverse Voltage	V_{RRM}	8	10	12	15	8	10	12	15	kV
Avg. Forward Current in Air, $T_a = 25^\circ\text{C}$	I_o	650	550	475	425	425	375	325	275	mA
Avg. Forward Current in Oil, $T_{oil} = 60^\circ\text{C}$	I_o	1200	1000	870	780	750	660	570	480	mA
Peak Surge Current, Single 1/2 Cycle @ 60 Hz	I_{FSM}	50				30				A
Peak Reverse Avalanche Energy, Non-Repetitive, $t = 20 \mu\text{s}$	E_{RSM}	160	200	240	300	80	100	120	150	mJ
Storage and Operating Temperatures	T_{stg}, T_j	- 55 to 150				- 55 to 150				$^\circ\text{C}$

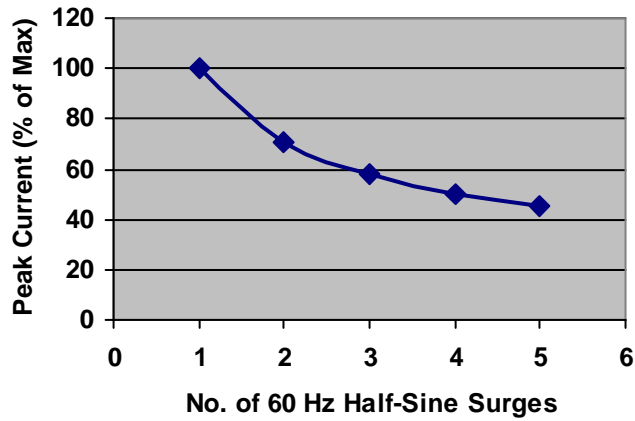
ELECTRICAL CHARACTERISTICS, T = 25°C

		8	10	12	15	20	25	30	37.5	
Maximum Instantaneous Forward Voltage, $I_F = 1.0 \text{ A}$	V_F	8	10	12	15	20	25	30	37.5	V
Maximum Reverse Current at Rated V_{RRM}	I_R	1.0				1.0				μA
Maximum Reverse Recovery Time, $I_F = 0.5 \text{ A}$, $I_R = 1 \text{ A}$, 75% Recovery	t_{rr}	2.5				0.075				μs

t_{rr} Definition



Max Surge Current



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