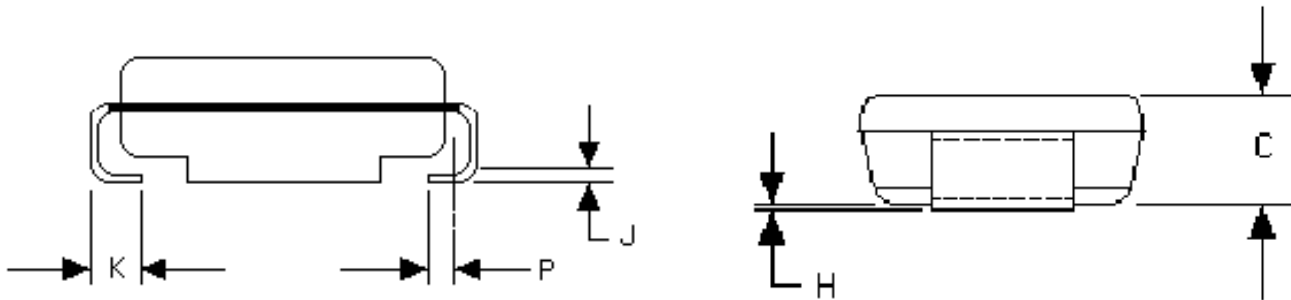
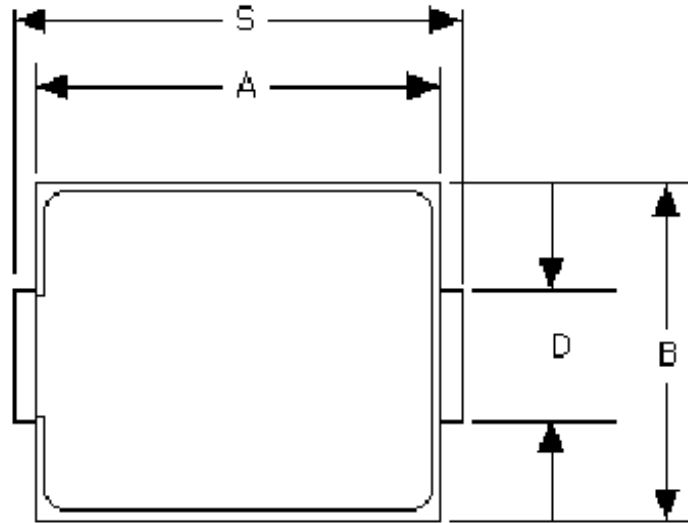


Specification Status: RELEASED

PHYSICAL DESCRIPTION



A		B		C		D*		H		J		K		P	S	
MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	REF	MIN	MAX
4.06	4.57	3.30	3.81	1.90	2.41	1.96	2.11	.051	.152	0.15	0.30	0.76	1.27	0.51	5.21	5.59
.160	.180	.130	.150	.075	.095	.077	.083	.002	.006	.006	.012	.030	.050	.020	.205	.220

* D DIMENSION SHALL BE MEASURED WITHIN DIMENSION P

Other Physical Characteristics

- Form Factor: SMB (Surface Mount DO-214 Package)
- Lead Material: Tin/lead finish
- Encapsulation Material: Epoxy, meets UL94 V-0 requirements
- Solderability: per MIL-STD-750, Method 2026
- Solder Heat Withstand: per MIL-STD-750, Method 2031
- Solvent Resistance: per MIL-STD-750, Method 1022
- Mechanical Shock: per MIL-STD-750, Method 2016

Tape and Reel packaging per EIA 481-1

DEVICE RATINGS @ 25° C (Both Polarities)

Parameter	Symbol	Value	Units
Off-State Voltage, Maximum at $I_D = 5 \mu A$	VDM	200	V
Non-Repetitive Peak Impulse Current Double exponential waveform (Notes 1 and 2)	$10 \times 1000 \mu sec$ $10/560 \mu sec$ $10/160 \mu sec$	IPP ₁ IPP ₂ IPP ₃	50 70 100 A A A
Critical Rate of Rise of On-State Current Maximum $2 \times 10 \mu sec$ waveform, $V_{OC} = 2.5kV$, $I_{SC} = 500A$ peak	di/dt	150	A/ μs

DEVICE THERMAL RATINGS

Storage Temperature Range	TSTG	-65 to 150	°C
Operating Temperature Range Blocking or conducting state	TA	-40 to 125	°C
Overload Junction Temperature Maximum; Conducting state only	TJ	+175	°C

ELECTRICAL CHARACTERISTICS Both polarities (T_J @ 25°C unless otherwise noted)

Characteristics	Symbol	Min	Typ	Max	Units
Breakover Voltage (+25°C) $dV/dt = 100V/\mu sec$, $I_{SC} = 1.0A$, $V_{DC} = 1000V$	VBO	----	260	320	V
Breakover Voltage (+25°C) $f = 60Hz$, $I_{SC} = 1.0Arms$, $V_{OC} = 1000Vrms$, $R = 1.0 k\Omega$, $t = 0.5$ cycle (Note 2)	VBO	----	260	320	V
Breakover Voltage Temperature Coefficient	dVBO/dTJ	----	0.08	-----	%/°C
Off-State Current (VD1= 50V)	ID1	----	-----	2.0	μA
(VD2= VDM)	ID2	----	-----	5.0	μA
On-State Voltage (IT=1A) PW $\leq 300 \mu sec$, Duty Cycle $\leq 2\%$ (Note 2)	VT	----	-----	5.0	V
Breakover Current	IBO	----	230	-----	mA
Holding Current (Note 2)	IH	175	350	----	mA
Critical Rate of Rise of Off-State Voltage (Linear waveform, $V_D = 0.8 \times$ Rated V_{BO} , $T_J = +25^\circ C$)	dv/dt	2000	----	----	V/ μs
Capacitance (f=1.0 Mhz, 50V _{DC} bias, 1 Vrms)	C1	----	20	----	pF
(f=1.0 Mhz, 2V _{DC} bias, 15mVrms)	C2	----	50	----	pF

Note 1. Allow cooling before test second polarity

Note 2. Measured under pulse conditions to reduce heating

VOLTAGE-CURRENT CHARACTERISTIC

