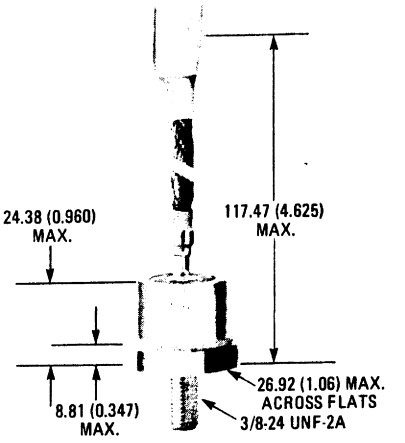
New Jersey Semi-Conductor Products, Inc.

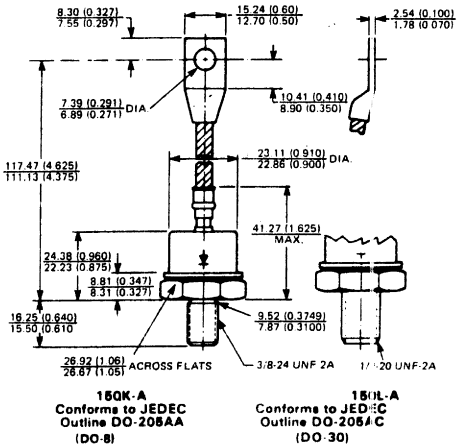
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45L, 150K-A, 150L-A, 150KS SERIES

CASE STYLE AND DIMENSIONS





Dimensions in Millimeters and (Inches)

PART NUMBER ①			V_{RRM} Max. repetitive peak reverse voltage (V)	V_{RSM} Max. non-repetitive peak reverse voltage (V)	V_R Max. average reverse voltage (V)	I_{RM} Max. peak reverse current at rated V_{RRM} (mA)
DO-30	DO-8	B-42	T_J = −40°C to 200°C	T_J = −40°C to 200°C	T_J = −40°C to 200°C	T_J = 200°C
45L10			100	200	100	40
45L20			200	300	200	40
45L40			400	500	400	40
45L60			600	720	600	40
45L80			800	960	800	40
45L100			1000	1200	1000	40
45L120			1200	1440	1200	40
			T_J = −65°C to 200°C	T_J = −65°C to 200°C	T_J = −65°C to 200°C	T_J = 175°C
150L5A	150K5A	150KS5	50	100	50	35
150L10A	150K10A	150KS10	100	200	100	35
150L20A	150K20A	150KS20	200	300	200	35
150L30A	150K30A	150KS30	300	400	300	35
150L40A	150K40A	150KS40	400	500	400	35
150L60A	150K60A	150KS60	600	720	600	35
150L80A	150K80A	150KS80	800	960	800	32
150L100A	150K100A	150KS100	1000	1200	1000	24
150L120A	150K120A	150KS120	1200	1440	1200	20

		150K-A	150KS	150L-A/45L	Units	Conditions
$I_{F(AV)}$	Max. average forward current @ Max. T_C	150			A	1-phase operation, 180° conduction
		150			°C	
I_{FSM}	Max. peak one-cycle non-repetitive surge current	3000			A	Half cycle 50 Hz sine wave or 6 ms rectangular pulse; following any rated load condition and with rated V_{RRM} applied.
		3143				Half cycle 60 Hz sine wave or 5 ms rectangular pulse
		3568			A	Half cycle 50 Hz sine wave or 6 ms rectangular pulse; following any rated load condition and with V_{RRM} applied following surge = 0.
		3738				Half cycle 60 Hz sine wave or 5 ms rectangular pulse
I^2t	Max. I^2t for fusing	45 000			A^2s	t = 10 ms; With rated V_{RRM} applied following
		41 000				t = 8.3 ms; surge, initial $T_J = T_J$ Max.
	Max. I^2t for individual device fusing	63 650				t = 10 ms; With V_{RRM} = 0 following surge,
		57 990				t = 8.3 ms; initial $T_J = T_J$ max.
$I^2\sqrt{t}$	Max. $I^2\sqrt{t}$ for individual device fusing	636 500			$A^2\sqrt{s}$	t = 0.1 to 10 ms, V_{RRM} = 0 following surge. ③
V_{FM}	Max. peak forward voltage	1.33			V	T_J = 25°C, I_{FM} = π x rated $I_{F(AV)}$ (471 A peak)
$V_{F(TO)}$	Max. value of threshold voltage	0.67			V	T_J = 200°C
r_F	Max. value of forward slope resistance	1.416			mΩ	

Quality Semi-Conductors