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30A SCHOTTKY BARRIER RECTIFIERS

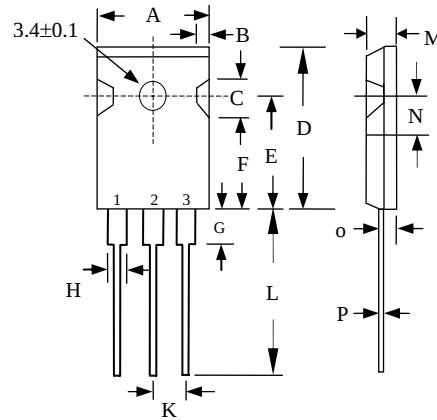
SR30-03 THRU SR30-06

FEATURES

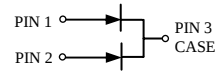
- DUAL RECTIFIER CONSTRUCTION, POSITIVE CENTER-TAP
- PLASTIC MATERIAL USED CARRIES UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0
- METAL TO SILICON RECTIFIER ,MAJORITY CARRIER CONDUCTION
- LOW POWER LOSS, HIGH EFFICIENCY
- HIGH CURRENT CAPABILITY, LOW VF
- HIGH SURGE CAPABILITY
- EPITAXIAL CONSTRUCTION
- FOR USE IN LOW VOLTAGE, HIGH FREQUENCY INVERTERS, FREE WHEELING, AND POLARITY PROTECTION APPLICATIONS
- HIGH SOLDERING TEMPERATURE :260°C /10S
0.17(4.3mm) LEAD LENGTH AT 5 LBS.(2.3KG) TENSION

MECHANICAL DATA

- CASE: MOLDED PLASTIC, TO-3P, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: LEAD SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: AS MARKED
- MOUNTING POSITION: ANY
- WEIGHT: 6.4 GRAMS



	MILLIMETERS	
	MIN	MAX
A	-	16.2
B	1.7	2.7
C	5.0	6.0
D	-	22.0
E	14.8	15.2
F	11.7	12.7
G	-	4.5
H	-	2.5
I	-	3.5
J	1.1	1.4
K	5.25	5.65
L	19.0	-
M	4.7	5.3
N	2.8	3.2
O	2.4	2.8
P	0.45	0.85



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED
SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	SR30-03	SR30-035	SR30-04	SR30-045	SR30-05	SR30-06	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	30	35	40	45	50	60	V
MAXIMUM RMS VOLTAGE	V_{RMS}	21	24	28	31	35	42	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	30	35	40	45	50	60	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT (SEE FIG.1)	I_O	30.0						A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	300						A
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JC}$	1.4						°C /W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150						°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 125			- 55 TO + 150			°C

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	SR30-03	SR30-035	SR30-04	SR30-045	SR30-05	SR30-06	UNITS
MAXIMUM FORWARD VOLTAGE AT 15A DC	V _F	0.60				0.70		V
MAXIMUM REVERSE CURRENT AT 25°C (NOTE 1) PER LEG	I _R	5.0						mA
MAXIMUM REVERSE CURRENT AT 100°C (NOTE 1) PER LEG	I _R	60				100		mA

NOTES: 1. PULSE TEST: 300µS PULSE WIDTH, 1% DUTY CYCLE

2. THERMAL RESISTANCE FROM JUNCTION TO CASE PER LEG MOUNTED ON HEAT SINK

RATINGS AND CHARACTERISTIC CURVES SR30-03 THRU SR30-06

FIG. 1 - FORWARD DERATING CURVE

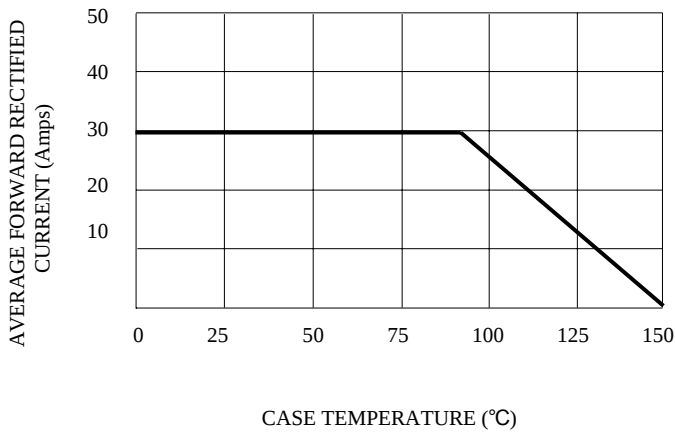


FIG. 2 - PEAK FORWARD SURGE CURRENT

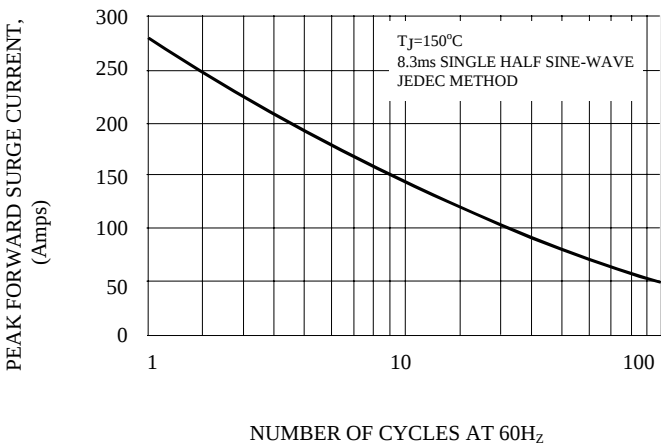


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

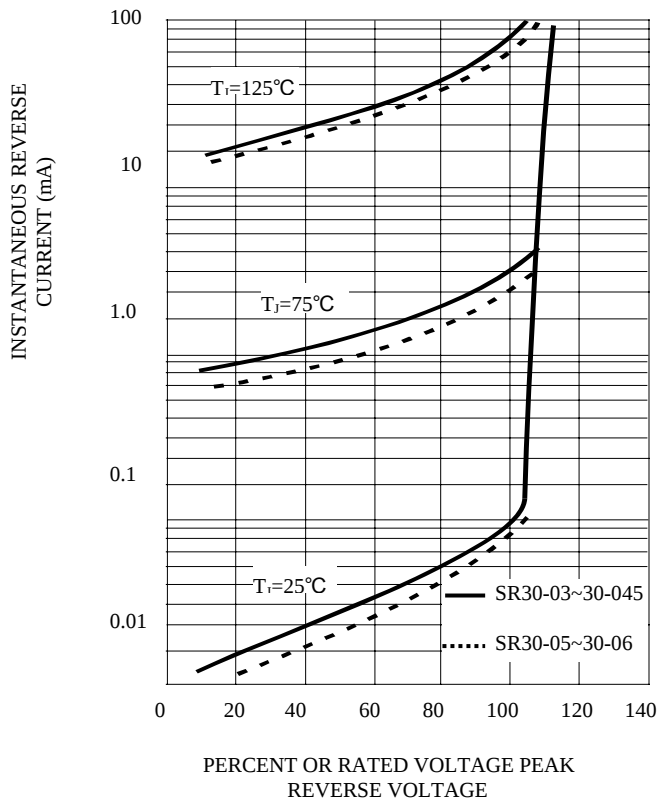


FIG. 4 - TYPICAL FORWARD CHARACTERISTIC

