



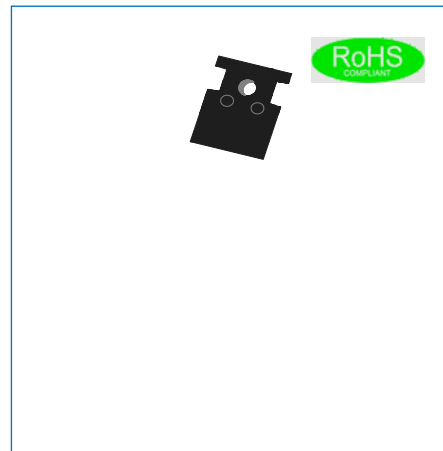
GP4516SRT

GENERAL PURPOSE RECTIFIER

Rev.1.4

DESCRIPTION

Plastic package has underwriters laboratories flammability classification 94V-0
Glass passivated chip junction
Lead free in compliance with EU RoHS 2011/65/EU directive



MECHANICAL DATA

Case: TO-247J, molded plastic over passivated junction
Terminals: Solder plated, solderable per J-STD-002
Weight: 6 gram

ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS(Per diode)

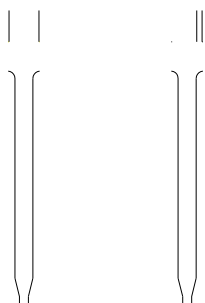
(Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter		Symbol	GP4516SRT	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	1600	V
Maximum RMS voltage		V_{RMS}	1120	V
Maximum DC blocking voltage		V_{DC}	1600	V
Average forward current at $T_L=90$		$I_{F(AV)}$	45	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	360	A
Maximum forward voltage @ $I_F=45A$		V_F	1.2	V
Maximum DC reverse current at rated DC blocking voltage	$T_j=25$	I_R	10	μA
	$T_j=150$		1.5	mA
Typical junction capacitance $V_R=4.0V$, $f=1MHz$		C_J	240	pF
Operating junction and storage temperature range		T_J, T_{STG}	-55 to +150	
Virtual junction temperature		T_{VJ}	-55 to +175	

THERMAL RESISTANCES

Symbol	Parameter	GP4516SRT	Unit
$R_{th(j-c)}$	Junction to case	0.4	/W

MARKING



PACKAGE INFORMATION-TO-247J

OUTLINE	UNIT WEIGHT (g/PCS) TYP	TUBE (PCS)	PER CARTON (PCS)
TUBE	6	30	2,250

CHARACTERISTICS CURVE

FIG.1: Typical forward characteristics

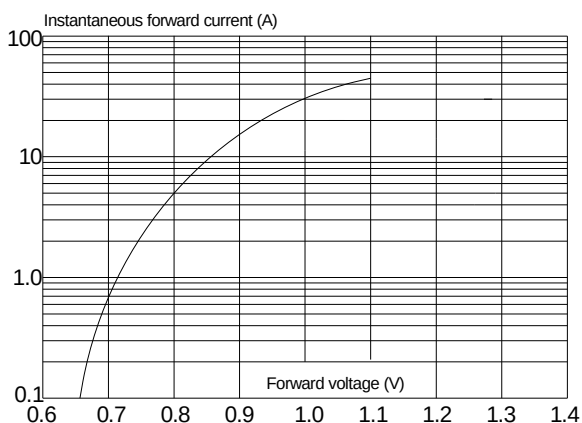


FIG.2: Typical reverse characteristics

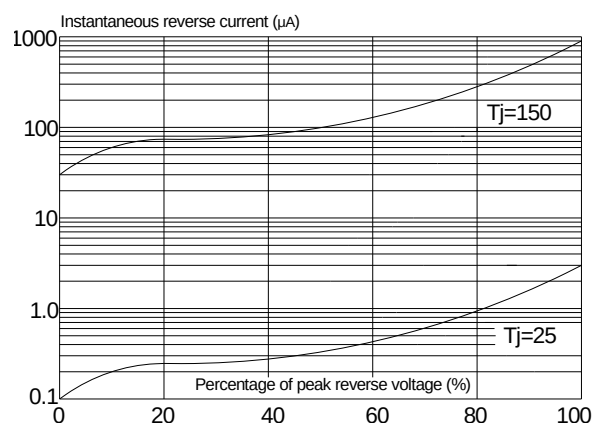


FIG.3: Maximum non-repetitive peak forward surge current

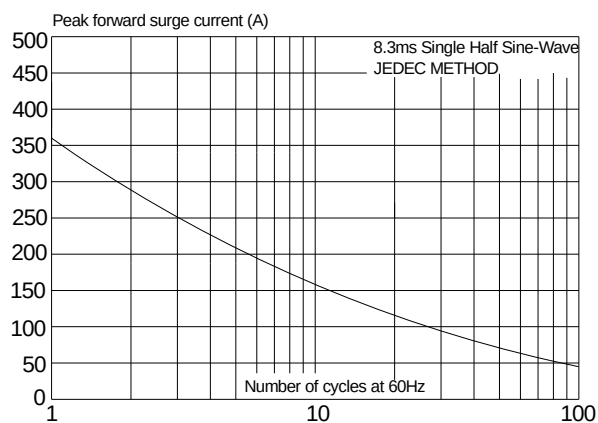
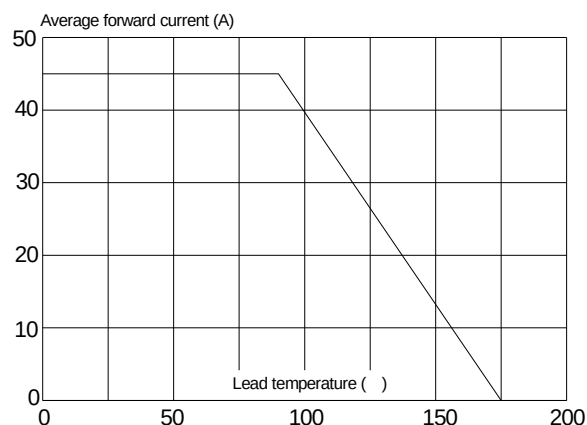


FIG.4: Forward current derating curve



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