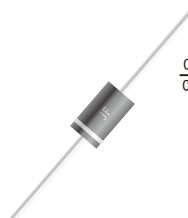
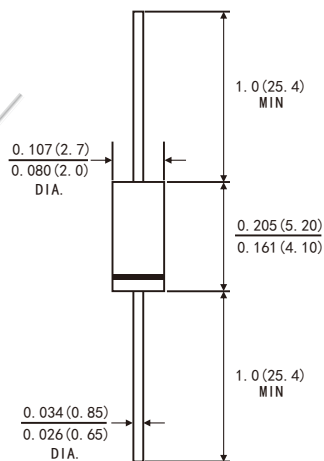


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU



DO-41



MECHANICAL DATA

- Case: JEDEC DO-41 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.012ounce, 0.33 gram

TYPICAL APPLICATIONS

For use in low voltage ,high frequency inverters ,DC/DC converters, free wheeling ,and polarity protection applications

PRIMARY CHARACTERISTICS	
I _{F(AV)}	1.0A
V _{RRM}	60V
I _{FSM}	40A
V _F at I _F =1.0A	0.45V
T _{JMAX}	150°C

MAXIMUM RATINGS

(Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	60	V
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	I _{F(AV)}	1.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I _{FSM}	40	A
Operating junction temperature range	T _J	-55 to+150	°C
Storage temperature range	T _{stg}	-55 to+150	°C

RATINGS AND CHARACTERISTIC OF SR160L

ELECTRICAL CHARACTERISTICS (T_A=25°C Unless otherwise noted)

Parameter	Test Conditions		Symbol	TYP.	MAX.	Unit
Instantaneous forward voltage	I _F =1.0A	T _A =25°C	V _F ¹⁾	0.53	0.55	V
		T _A =100°C		0.47	0.49	
		T _A =125°C		0.45	0.47	
Reverse current	V _R =60V	T _A =25°C	I _R ²⁾	60	150	μA
		T _A =100°C		5	10	mA
		T _A =125°C		15	30	
Typical junction capacitance	4V, 1MHz		C _J	110		pF

Notes: 1.Pulse test: 300 μs pulse width, 1% duty cycle

2.Pulse test: pulse width ≤ 40ms

THERMAL CHARACTERISTICS

Parameter	Symbol	DO-41	Unit
Typical thermal resistance ³⁾	R _{θJA}	50.0	°C/W
	R _{θJL}	15.0	

3.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.375"(9.5mm)lead length

AVAILABLE PACK INFORMATION

Product code	Pack	Box Size L*W*H(mm)	Quantity (pcs/box)	Carton Size L*W*H(mm)	Quantity (box/carton)
SR160L-DO-41	B/P	190*80*21	1000	433*203*230	50
SR160L-DO-41	T/B	264*74*135	5000	400*267*286	50

RATINGS AND CHARACTERISTIC OF SR160L

FIG.1-FORWARD CURRENT DERATING CURVE

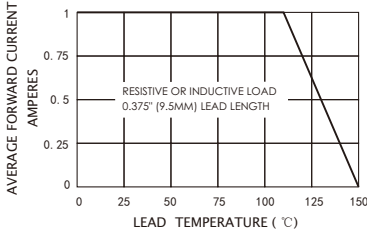


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

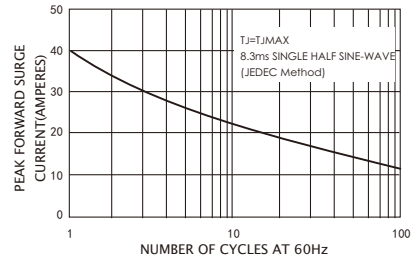


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

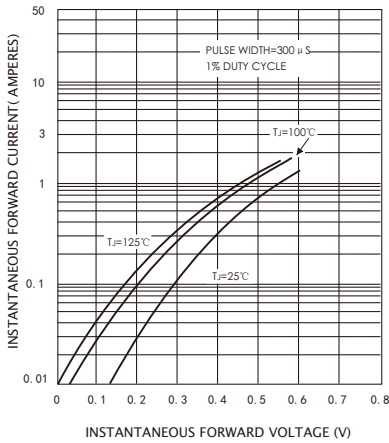


FIG.4-TYPICAL REVERSE CHARACTERISTICS

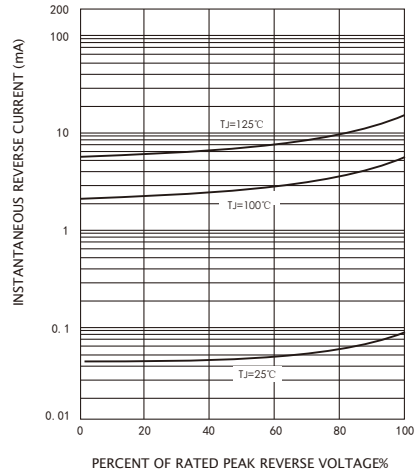


FIG.5-TYPICAL JUNCTION CAPACITANCE

