TSS16D20C THRU TSS16D100C

Voltage Range 20 to 100 V
Current 16.0 Ampere

Features

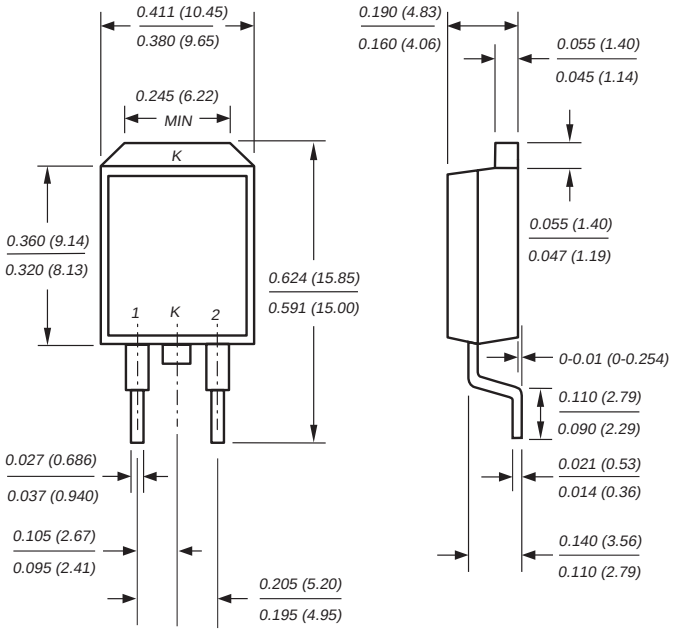
- ✶ Low forward voltage drop
- ✶ High current capability
- ✶ High reliability
- ✶ High surge current capability

Mechanical Data

- ✶ Case: Molded plastic D2-PAK
- ✶ Epoxy: UL 94V-0 rate flame retardant
- ✶ Terminals: Solderable per MIL-STD-750 method 2026
- ✶ Polarity:Color band denotes cathode end
- ✶ Mounting position: Any
- ✶ Weight: 1.7 grams

Dimensions in inches and (millimeters)

D2-PAK



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

PARAMTER	SYBMOL	TSS16D 20C	TSS16D 40C	TSS16D 60C	TSS16D 80C	TSS16D 100C	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	V
Maximum Average Forward Rectified Current T_C=105°C	$I_{F(AV)}$	16.0					A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150					A
Maximum Instantaneous Forward Voltage @ 8.0 A	V_F	0.55		0.65	0.75	0.85	V
Maximum DC Reverse Current @T_J=25°C	I_R	1.0					mA
At Rated DC Blocking Voltage @T_J=100°C		15		50			
Typical junction Capacitance (Note 1)	C_J	300					pF
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +125 / -55 to +150					°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

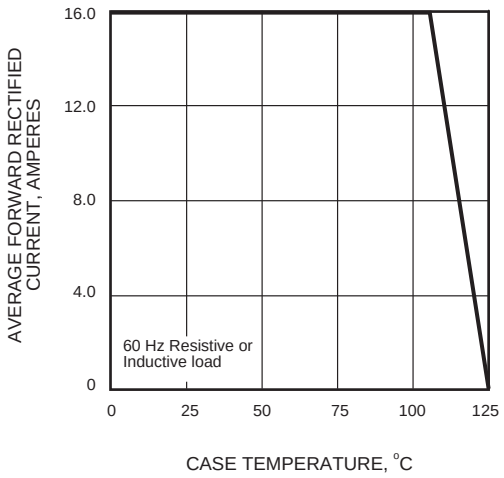


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

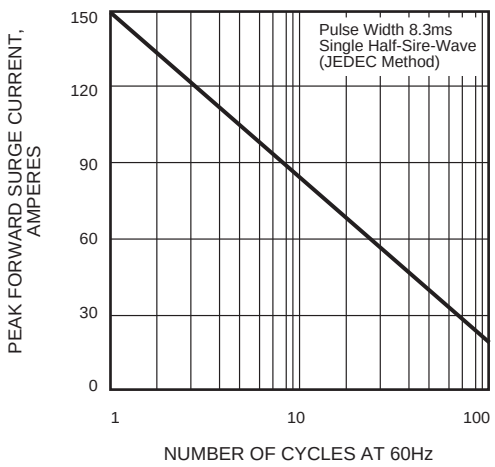


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

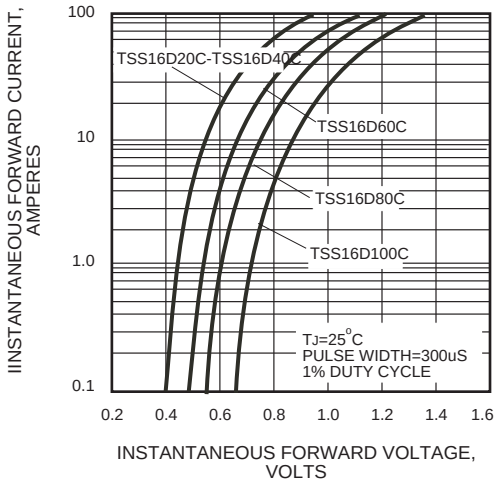


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

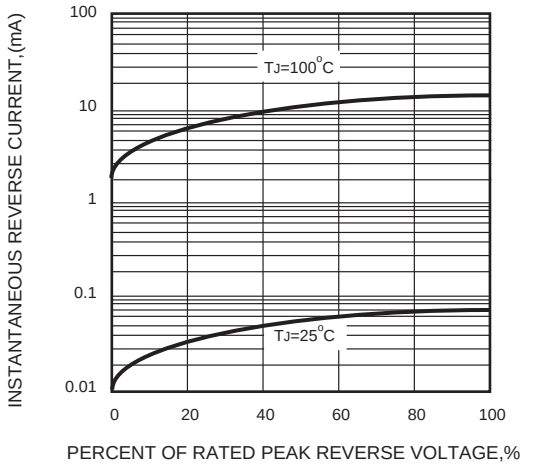


FIG.5 - TYPICAL JUNCTION CAPACITANCE